TGT - LAB
REGISTROS GEOLOGICOS

FINAL WELL REPORT

WELL: LO6-27D

JANUARY-FEBRUARY-MARCH
2013

SAVIA PERU S.A.

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INTRODUCTION

TGT – LAB S.A.C. started Mud Logging Operations on the Well LO6-27D on January 21st, 2013 at 620 feet depth, and finished on March 08th, at the depth of 11095.0 feet TD(RT), with 5" Liner cementation; liner Shoe at 11092 feet.

Origin:	
Surface Northing	9'508,655.23 m.
Surface Easting	459,043.07 m.
Main objective:	Lower Basal Salina Formation
Secondary objective:	Upper Basal Salina Formation
Objective Northing	9'506,744.80 m
Objective Easting	458,502.19 m
Kelly Bushing	50 ft.
Water depth	-335 ft.
Total Depth	11095 ft.
Reference	DATUM-WGS -84 UTM

It is proposed to drill a wildcat well LO6-27D to produce oil from Lower Basal Salina and Upper Basal Salina reservoir in Lobitos oil field.

The well LO6-27D will be drilled from platform Lobitos 6 and will reach a final depth of 8332.80 feet (TVD).

The geological control for Upper Basal Salina and Lower Basal Salina reservoirs is based on stratigraphic and structural data from neighbors wells drilled in field.

This report includes the geological, rig activity from the Mud Logging Unit of the Well LO6-27D from 620 feet measured depth (Rotary Table) from January 21st, 2013; to the Final Total Depth at 11095 feet that was reached on March 03rd, 2013.

To drill this Well, the company SAVIA PERÚ, used a "BASIC ON LINE UNIT" of Mud Logging, with the capture of On-Line Data using equipment belonging to T.G.T. LAB S.A.C.

This Unit was endowed with the following equipment:

Hook height measurement:

Draw work sensor

Drilling parameters:

Stand pipe pressure
Weight on bit
Depth (Measure Depth and True Vertical Depth)
MMRPM (Down Hole Motor RPM)
ROP (Rate of Penetration)

Mud system:

Pit Suction level # 1 (Sonic sensor)
Pit Pre-suction level # 2 (Sonic sensor)
Pit Desander level # 3 (Sonic sensor)
Pit Desilter level # 4 (Sonic sensor)

Mud pumps:

Pump # 1 (Triplex)
Pump # 2 (Triplex)
Pump # 3 (Triplex)

Gas chain specification:

Gas trap neumatic shaker box
Gas Cromatograph FID SRI 8610C gas cicle 40”

Data acquisition system:

1 computer DRILL VIEW ADQ for Real time acquisition.
1 computer Windows 2003 Server for data bases.
1 computer Windows XP, for Geology Data control.
1 computer Windows XP, for Chromatograph control.
1 computer Windows XP, for Repetition screen on CoMan office.

- The monitoring Unit is composed of a cabin equipped by T.G.T. LAB.
- The system is designed for the acquisition and storage of Geologic Information and the continuous monitoring of the perforation process.
- The analysis of the gathered information is a tool of great help for the personnel in charge of the taking of immediate decisions or of the optimization of the different variables.
- The continuous monitoring of the process allows detecting complications and mishaps in advance, as well as it helps in the prevention of situations of risk for the personnel and drilling teams.

The geologic interpretation was carried out as a continuous analysis of the drilling cuttings with the purpose of defining parameters such the content of Hydrocarbons and Lithology. For the definition of an area of interest, a good indicator is the concentration of gassy hydrocarbons extracted directly from the perforation mud. The Gas Chromatography provides a qualitative and quantitative analysis of the gas content in the sample co relatable to the composition of the hydrocarbons present.
By means of the use of different sensors installed in strategic points of the Rig, it becomes possible the record and calculate of a wide range of parameters like:

Measured Depth, Lag Depth, Bit Depth.
Rate of Penetration
Hook Load
Weight on Bit
Bit Position
RPM on Down Hole Motor
Total Bit Hours on Bottom
SPM and Total SPM
Pit Volume Totalizer
Flow in GPM
Pump Pressure
Chromatographic Analysis

In addition to the parameters measured in the different points of the drilling, inside the geology cabin and thanks to the accessories of geologic support, it was also possible to carry out the analysis of such auxiliary parameters as: complete Lithological and Show descriptions, Fluorescence Data and Drilling Operations which are included accordingly.

The On-line applications allowed in different occasions to "review" and "replay" drilling events in diverse graphic and numeric formats during the monitoring of the perforation activities. With the help of a second computer the data in On-line form it was transfered toward the database Off-Line Computer where the information was processed to allow the elaboration of different graphic registrations such as: Formation Evaluation Log.

The information obtained from the different equipment and the analysis of samples each 30 feet from 456 to 6000 feet; and each 10 feet from 6000 feet to 11095 feet; in two (2) Graphic Logs: The Formation Evaluation Log at scale 1:500 (Measured Depth and True Vertical Depth.)

In this one the penetration rate each ½ feet is included, the lithology in percentage and interpreted form, lithological description, oil and gas shows present with its corresponding evaluation; utilized bits, mud information, drilling parameters, casing, as well as those activities that were considered of interest.

GEOLOGICAL REPORT

WELL AND RIG DATA

Company:	SAVIA PERU	
Well Name:	LO6-27D	
Well Type:	DEVELOPMENT	
Field:	LOBITOS OFFSHORE	
Basin:	TALARA	
State:	PIURA	
Country:	PERU	
Coordinates (WGS-84 UTM):	**North**	**East**
Origin: **Main Objective:(LOWER BASAL SALINA FM)**	9'506,744.80 m	458,502.19 m
Rotary table:	50 ft.	
Water Depth:	-233 ft.	
Spud Date:	JANUARY 18st 2013	
End Date:	MARCH 03rd 2013	
Total Depth:	11095.0 ft. MD (RT); 8332.80 ft. TVD (RT)	
Drilling Contractor / Rig:	PEPESA / P-40	
Drilling Fluids:	HALLIBURTON	
Logging Contractor:	SCHLUMBERGER	
Mud logging / Unit:	TGT – LAB	
Well site Geologist:	D. PAZ/J. CORONADO/A. ORTEGA.	
TGT-LAB Geologist:	G. CARDOZA/O. HUAMAN/O. OJEDA /A. PELLEGRIN	

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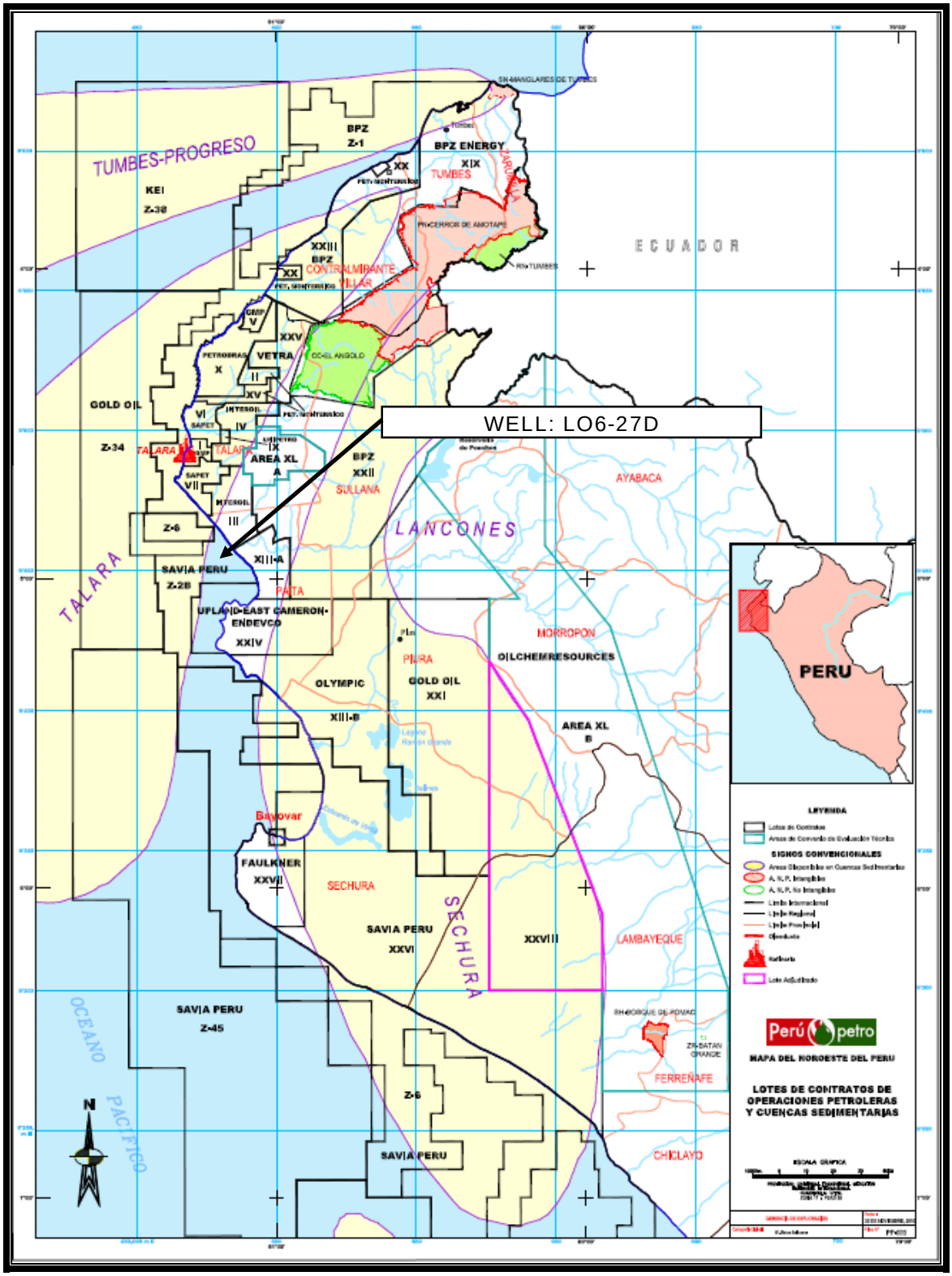

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FORMATION TOPS

WELL LO6-27D

SAVIA PERÚ

Elevación RKB: 50 ft **SEA DEPTH:** 335 ft

ROTARY TABLE: 50 ft.	PREDICTED TOPS			LITHOLOGIC TOPS BY SAMPLES			TOPS BY ELECTRICAL LOGS		
FORMATION/ZONE	MD (ft) RT (ft)	DEPTH TVD (ft)	DEPTH SSTVD (ft)	MD (ft) RT (ft)	DEPTH TVD (ft)	DEPTH SSTVD (ft)	MD (ft) RT (ft)	DEPTH TVD (ft)	DEPTH SSTVD (ft)
Talara									
Chacra	3000.0	2400.0	-2350.0	2860.0	2517.60	-2467.60			
Rio Bravo	3400.0	3250.0	-3200.0	3405.0	2890.40	-2840.40			
Palegreda	5850.0	4570.0	-4520.0	5736.0	4479.08	-4429.08			
Mogollon	6900.0	5220.0	-5170.0	6330.0	4899.64	-4899.64			
San Cristobal	7800.0	5750.0	-5700.0	8229.0	6200.51	-6150.51			
Upper Basal Salina	9450.0	7050.0	-7000.0	10332.0	7683.92	-7633.92			
Lower Basal Salina	10345.0	7626.0	-7576.0	-	-	-			
Balcones	10800.0	7955.0	-7905.0	10980.0	8228.70	-8178.70			
Final T.D.	11084.0	8130.0	-8080.0	11095.0	8332.80	-8282.80			

STRATIGRAPHIC COLUMN

AGE			FORMATION	THICKNESS (ft)	LITHOLOGY	DESCRIPTION
CENOZOIC	TERTIARY	EOCENE	TALARA	2518.0		**Sand:** wh, 60% f, 20% vf, 20% m, tr crs qtz gr, hyal, trnsl, sbang- sbrnd, fr srtd, w/dk & gn frag lit. **Sandstone:** med dk gry, med gry, vf - f qtz gr, hyal, trnsl, sbang-sbrnd, wl srtd, calc cmt, mod fri-fri, occ consol w/dk & gnsh min, p vis por. N.O.S. **Claystone:** olv blk, olv gry, loc dk gry, ea, blky-sblky, frm-mod frm, sli sol, micmic, miccarb, sli calc. **Claystone:** olv blk, olv gry, med dk gry, occ brnsh gry, dk yelsh brn, ea-sm i/p, blky-sblky, loc sbtab, amor, mod sft-mod frm, occ slty, sli sol, occ w/glauc incl, micmic, miccarb, calc. **Sandstone:** med dk gry, med gry, vf-f qtz gr, hyal, trnsl, sbang-sbrnd, wl srtd, scs arg mtrx, calc cmt, mod fri, occ mod consol, w/dk min incls, p vis por. N.O.S. **Siltstone:** med dk gry, olv gry, ea, blky-sblky, loc amor, mod frm, micmic, miccarb, grad-vf Sst, sli calc. **Dolomite:** dk yelsh brn, pal yelsh brn, ea, blky-sblky, mod frm-frm, miccarb.
			CHACRA	373.0		**Claystone:** med dk gry, olv gry, olv blk, occ brnsh gry, dk yelsh brn, ea, blky-sblky, sbtab i/p, mod frm-mod sft, occ slty, sli sol, micmic, miccarb, sli calc. **Siltstone:** med gry, med dk gry, ea, blky-sblky, loc amor, mod frm, micmic, miccarb, grad-vf Sst, sli calc. **Dolomite:** dk yelsh brn, pal yelsh brn, ea, blky-sblky, frm-mod frm, miccarb. **Claystone:** med dk gry, olv gry, olv blk, loc brnsh gry, dk yelsh brn, ea, blky-sblky, sbtab i/p, mod frm-mod sft, occ slty, sli sol, micmic, miccarb, sli-n calc. **Siltstone:** med gry, med dk gry, ea, blky-sblky, loc amor, mod frm, micmic, miccarb, grad-vf Sst, sli calc.
			RIO BRAVO	1589.0		**Sand:** wh, 50% vf, 50% f, tr m qtz gr, hyal, transl, sbang-sbrnd, wl srtd, w/dk lits. **Claystone:** med dk gry, olv gry, brnsh gry, loc dk gry, ea, sbblky-blky, loc sbtab, amor, mod sft-mod frm, occ sft, slty i/p, sli sol, micmic, miccarb, occ calc. **Siltstone:** med dk gry, dk gry, ea, sbblky-blky, amor, mod frm-frm, occ sft, micmic, miccarb, grad-vf sst, calc i/p. **Sandstone:** med gry, medi lt gry, vf-f qtz gr, hyal, transl, sbang-sbrnd, wl srtd, arg mtrx i/p, calc cmt, fri-mod fri, w/dk mnrls incl, p vis por. N.O.S. **Fluor:** 35% pin point pal yel nat fluor, slw, wk, fnt, even, yelsh wh cut fluor, mlky wh res ring under U. V. lt, n res ring at nat lt. **Siltstone:** med gry, med dk gry, ea, blky-sbblky, loc sbtab, amor, frm-mod frm, micmic, miccarb, grad-vf sst, calc. **Claystone:** med dk gry, dk gry, ea, blky-sbblky, loc sbtab, occ sblam, amor, frm-mod frm, slty, loc sol, micmic, miccarb, n calc. **Sandstone:** med lt gry, lt gry, vf-f qtz gr, hyal, transl, sbang-sbrnd, wl srtd, calc cmt, mod fri, loc mod consol, w/dk mnrls incl, p vis por. N.O.S.
			PALEGREDA	421.0		**Claystone:** med dk gry, dk gry, loc olv blk, ea i/p, blky-sblky, sbtab i/p, occ sblam, mod frm-mod sft, occ slty, micmic, miccarb, n calc. **Siltstone:** med gry, med dk gry, occ med dk gry, ea, blky-sblky, amor i/p, mod frm, micmic, miccarb, occ micpyr, grad-vf sst, sli calc. **Sandstone:** med gry, med dk gry, med lt gry, occ lt gry, vf-f qtz gr, hyal, trnsl, sbang-sbrnd, wl srtd, arg mtrx i/p, calc cmt, mod fri-mod consol, occ ti, drty i/p, w/dk min incl, micmic, miccarb i/p, p vis por. N.O.S. **Sand:** wh, 60% f, 40% vf, tr med qtz gr, hyal, trnsl, sbang-sbrnd, wl srtd. **Claystone**: med dk gry, dk gry, olv blk, occ grysh blk, ea i/p, sblky-blky, mnr sblam, occ sbtab, mod frm-mod sft, loc slty, micmic, miccarb, loc w/pyr incl, n calc. **Siltstone:** med gry, med dk gry, ea, blky-sblky, amor i/p, mod frm, micmic, miccarb, occ micpyr, grad-vf sst, sli calc. **Dolomite:** dk yelsh brn, pal brn, ea, blky-sblky, frm-mod hd, miccarb i/p.
			MOGOLLON	1301.0		**Claystone:** med lt gry, med gry, grysh blk, ea, amor, sft, plas, v sol, occ slty, miccarb, n calc. **Sandstone:** med lt gry, vf-f qtz gr, hyal, sbang-sbrnd, wl srtd, arg mtrx, mod fri, w/dk min incl, miccarb i/p, p vis por. N.O.S. **Siltstone:** dk gry, ea, blky-sblky, amor, mod frm-sft, micmic, miccarb i/p, grad/vf sst. **Sand:** wh, 60% f, 40% m qtz gr, hyal, trnsl, ang-sbang, wl srtd. **Claystone:** med dk gry, dk gry, loc grysh blk, occ brnsh blk, ea, blky-sblky, occ sblam-sbplty, mod frm-frm, loc slty, micmic, miccarb, n calc. **Sandstone:** lt gry, med lt gry, f, loc m qtz gr, hyal, sbang-sbrnd, wl srtd, arg mtrx, scs calc cmt, mod fri-fri, loc w/dk min incl, p vis por. **Fluorescence:** NVOS, 5-10%, pin point, dull, pal yelsh nat fluor, crush, fnt, pal, strmng, yelsh wh cut fluor, n vis res ring. **Sand:** wh, 50% f, 40% m, 10% crs qtz gr, hyal, sbang-sbrnd, wl srtd. **Claystone:** dk gry, med dk gry, loc grysh blk, ea, blky-sblky, loc sblam, sbfis i/p, mod frm-frm, loc sft, occ brit, slty, micmic, miccarb i/p, n calc.
			SAN CRISTOBAL	1483.0		**Claystone:** med lt gry, med gry, grysh blk, ea, amor, sft, plas, v sol, occ slty, miccarb, n calc. **Sandstone:** med lt gry, vf-f qtz gr, hyal, sbang-sbrnd, wl srtd, arg mtrx, mod fri, w/dk min incl, miccarb i/p, p vis por. N.O.S. **Siltstone:** dk gry, ea, blky-sblky, amor, mod frm-sft, micmic, miccarb i/p, grad-vf sst. **Sand:** wh, 60% f, 40% m qtz gr, hyal, trnsl, ang-sbang, wl srtd. **Claystone:** med dk gry, dk gry, loc grysh blk, occ brnsh blk, ea, blky-sblky, occ sblam-sbplty, mod frm-frm, loc slty, micmic, miccarb, n calc. **Sandstone:** lt gry, med lt gry, f, loc m qtz gr, hyal, sbang-sbrnd, wl srtd, arg mtrx, scs calc cmt, mod fri-fri, loc w/dk min incls, p vis por. **Fluorescence:** NVOS, 5-10%, pin point, dull, pal yelsh nat fluor, crush, fnt, pal, strmng, yelsh wh cut fluor, no vis res ring. **Sand:** wh, 50% f, 40% m, 10% crs qtz gr, hyal, sbang-sbrnd, wl srtd. **Claystone:** dk gry, med dk gry, loc grysh blk, ea, blky-sblky, loc sblam, sbfis i/p, mod frm/frm, loc sft, occ brit, slty, micmic, miccarb i/p, n calc.
			UPPER BASAL SALINA	545.0		**Claystone:** dk gry, grysh blk, occ med dk gry, ea, blky-sblky, occ tab, frm-mod frm, loc slty, micmic, occ miccarb, n calc. **Sandstone:** med gry, loc med lt gry, vf-f qtz gr, hyal, sbang-sbrnd, wl srtd, arg mtrx, scs calc cmt, ti, wld min incl, p vis por. **Fluorescence:** NVOS, tr, pin point, dull, pal yelsh nat fluor, slow, weak, pal, even, yelsh wh cut fluor, no vis res ring. **Sand:** wh, 60% f, 40% m qtz gr, hyal, trnsl, sbang-sbrnd, wl srtd. **Claystone:** dk gry, grysh blk, loc olv blk, occ brnsh blk, ea, blky-sblky, loc sbtab, frm, slty i/p, micpyr, micmic, miccarb, n calc. **Sand:** wh, vf-f qtz gr, hyal, trnsl, sbang-sbrnd, wl srtd. **Sandstone:** med gry, loc med lt gry, vf-f qtz gr, hyal, sbang-sbrnd, wl srtd, arg mtrx, calc cmt, mod fri-fri, w/dk & gnsh min incl, p vis por. **Fluorescence:** NVOS, 10-15%, pin point, dull, pal yel nat fluor, crush, fnt, pal, strmng, yelsh wh cut fluor, no vis res ring.
		PALEO CENO	BALCONES	104.0		**Claystone:** dk gry, grysh blk, med dk gry, occ blk, ea, blky-sblky, loc sbtab-sblam, frm, loc slty, micmic, sli miccarb, n calc.

TOTAL DEPTH: 11095.0 ft. MD (RT), 8332.80 ft. TVD (RT)

STRATIGRAPHIC SEQUENCE

WELL: LO6-27D

The Stratigraphy Column expected in this well was the same according to correlations with the original prognosis, consists of the following Formations and Members: Talara, Chacra, Rio Bravo, Palegreda, Mogollon, San Cristobal, Upper Basal Salina, Balcones of Tertiary age.

TGT LAB started logging into Talara Formation at 620 feet to the total depth on Balcones at 11095 feet MD; 8332.80 feet TVD.

CENOZOIC

TERTIARY

TALARA FORMATION — Interval: 0 to 2860 feet

The lithology at the upper section was conformed predominantly by Sand and Sandstone with some layers of Claystone.

Sand: white, 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted, with dark and green fragment lithics.

Sandstone: medium dark gray, medium gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally consolidated with dark and greenish mineral, poor visual porosity. No Oil Show.

Claystone: olive black, olive gray, locally dark gray, earthy, blocky to subblocky, firm to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.

At the lower section the lithology was conformed mainly Claystone with some intercalations of Sandstone and small lens of Dolomite and Siltstone.

Claystone: olive black, olive gray, medium dark gray, occasionally brownish gray, dark yellowish brown, earthy to smooth in part, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, occasionally silty, slightly soluble, occasionally with glauconite inclusions, micromicaceous, microcarbonaceous, calcareous.

Sandstone: medium dark gray, medium gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, occasionally moderately consolidated, with dark mineral inclusions, poor visual porosity. No Oil Show.

Dolomite: dark yellowish brown, pale yellowish brown, earthy, blocky to subblocky, moderately firm to firm, microcarbonaceous.

Siltstone: medium dark gray, olive gray, earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.
Accessories: Calcite, pyrite, microfossils, coal, glauconite.

CHACRA FORMATION — Interval: 2860 to 3405 feet

The lithology in this formation was conformed mainly by Claystone with some intercalations Siltstone and horizons of Dolomite.

Claystone: medium dark gray, olive gray, olive black, occasionally brownish gray, dark yellowish brown, earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.

Siltstone: medium gray, medium dark gray, earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.

Dolomite: dark yellowish brown, pale yellowish brown, earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous.

At the lower section:

Claystone: medium dark gray, olive gray, olive black, locally brownish gray, dark yellowish brown, earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.

Siltstone: medium gray, medium dark gray, earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.

Accessories: calcite, pyrite, limestone, coal, shell fragments, glauconite.

RIO BRAVO FORMATION — Interval: 3405 to 5736 feet

This formation is constituted by Sand, Sandstone, Siltstone and Claystone.

At the upper section:

Claystone: olive black, medium dark gray, olive gray, locally brownish gray, earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.

Sandstone: medium gray, medium light gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, with dark mineral inclusions, microcarbonaceous in part, micromicaceous, poor to fair visual porosity.
Fluorescence: traces - 10% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.

Sand: white, 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.

Siltstone: medium gray, medium dark gray, earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.

At the middle section:

Sand: white, 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.

Sandstone: medium gray, medium light gray, locally medium dark gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark mineral inclusions, microcarbonaceous in part, poor visual porosity.
Fluorescence: traces-60% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.

Claystone: olive black, medium dark gray, olive gray, locally brownish gray, earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.

Siltstone: medium gray, medium dark gray, earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.

At the lower section:

Sand: white, 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.

Claystone: medium dark gray, dark gray, locally olive black, occasionally dusky yellowish brown, earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.

Sandstone: medium gray, medium light gray, light gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark mineral inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show.

Siltstone: medium gray, medium dark gray, earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.

Accessories: calcite, shell fragments, slickenside, pyrite, dolomite.

PALEGREDA FORMATION **Interval: 5736 to 6330 feet**

The lithology in this formation was conformed predominantly by Claystone with some intercalations of Siltstone, small lens of Sandstone, Sand and Dolomite.

At the upper section the lithology was conformed mainly by Claystone intercalated with Siltstone and Sandstone, small lens of Sand.

Claystone: medium dark gray, dark gray, locally olive black, earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.

Siltstone: medium gray, medium dark gray, occasionally medium dark gray, earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.

Sandstone: medium gray, medium dark gray, medium light gray, occasionally light gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidate, occasionally tight, dirty in part, with dark mineral inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show.

Sand: white, 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.

In the lower section the lithology was conformed mainly by Claystone intercalated with Siltstone and small lens of Dolomite.

Claystone: medium dark gray, dark gray, olive black, occasionally grayish black, earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, locally with pyrite inclusions, non calcareous.

Siltstone: medium gray, medium dark gray, earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.

Dolomite: dark yellowish brown, pale brown, earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part.

Accessories: calcite, pyrite, dolomite, limestone.

MOGOLLON FORMATION **Interval: 6330 to 8229 feet**

The lithology in this formation was conformed mainly by Sand, Sandstone, Claystone, and some intercalations of Siltstone.

At the upper section the lithology was conformed mainly by Sand, Sandstone and layers of Claystone and Siltstone.

Sand: white 70% fine, 30% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.

Sandstone: medium light gray, medium gray, occasionally light gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark mineral inclusions, microcarbonaceous in part, poor visual porosity.
Fluorescence: traces-30% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.

Claystone: medium dark gray, dark gray, occasionally grayish black, olive gray, earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.

Siltstone: medium gray, medium dark gray, earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.

At the middle section the lithology was conformed by Sand, Sandstone, Claystone and Siltstone.

Sand: white 80% fine, 10% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.

Sandstone: medium gray, medium light gray, occasionally light gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green mineral inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity.
Fluorescence: traces-15% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.

Claystone: dark gray, medium dark gray, locally grayish black, occasionally olive black, earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.

Siltstone: medium gray, medium dark gray, earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.

At the lower section the lithology was conformed by Sand, Sandstone intercalated with Siltstone and Claystone.

Sand: white, 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.

Sandstone: medium light gray, medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green mineral inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.

Siltstone: medium gray, medium dark gray, earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.

Claystone: dark gray, medium dark gray, grayish black, occasionally olive black, earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.

Accessories: calcite, limestone, shell fragments, pyrite, coal, dolomite, slickenside.

SAN CRISTOBAL FORMATION — Interval: 8229 to 10332 feet

The lithology in this formation was conformed mainly by Claystone, and layers of Sandstone, Siltstone and Sand.

At the upper section the lithology was conformed by Claystone intercalated with Sandstone, Siltstone and Sand.

Claystone: medium light gray, medium gray, grayish black, earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous.

Sandstone: medium light gray, very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark mineral inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.

Siltstone: dark gray, earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.

Sand: white, 60% fine, 40% medium quartz grain, hyaline, translucent, angular to subangular, well sorted.

At the middle section the lithology was conformed by Claystone, intercalated with Sandstone and Sand.

Claystone: medium dark gray, dark gray, locally grayish black, occasionally brownish black, earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.

Sandstone: light gray, medium light gray, fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark mineral inclusions, poor visual porosity.
Fluorescence: NVOS, 5-10%, pin point, dull, pale yellowish natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring.

Sand: white, 50% fine, 40% medium, 10% coarse quartz grain, hyaline, subangular to subrounded, well sorted.

At the lower section the lithology was conformed mainly by Claystone.

Claystone: dark gray, medium dark gray, locally grayish black, earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.

Accessories: calcite, pyrite, microfossils, dolomite, coal.

UPPER BASAL SALINA — Interval: 10332 to 10980 feet

The lithology in this formation was conformed mainly by Claystone intercalated with Sand and Sandstone.

At the upper section the lithology was conformed by Claystone intercalated with Sandstone and Sand.

Claystone: dark gray, grayish black, occasionally medium dark gray, earthy, blocky to subblocky, occasionally tabular, firm to moderately firm, locally silty, micromicaceous, occasionally microcarbonaceous, non calcareous.

Sandstone: medium gray, locally medium light gray, very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with dark mineral inclusions, poor visual porosity.
Fluorescence: NVOS, traces, pin point, dull, pale yellowish natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, no visual residual ring.

Sand: white, 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.

At the lower section the lithology was conformed by Claystone intercalated with Sand and Sandstone.

Claystone: dark gray, grayish black, locally olive black, occasionally brownish black, earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous.

Sand: white, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.

Sandstone: medium gray, locally medium light gray, very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, with dark and greenish mineral inclusions, poor visual porosity.
Fluorescence: NVOS, 10-15%, pin point, dull, pale yellow natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring.

Accessories: calcite, pyrite, slickenside.

BALCONES FORMATION **Interval: 10980 to 11095 feet**

Lithology in this formation consists of Claystone.

Claystone: dark gray, grayish black, medium dark gray, occasionally black, earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous.

Accessories: calcite.

T.G.T - LAB
REGISTROS GEOLÓGICOS

SAVIA PERÚ

LITHOLOGICAL DESCRIPTION

WELL: LO6-27D

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
Started logging & Monitoring Data from 620 feet on January 21st, 2013 In Helico member (Talara Formation).			
620 – 650	60 30 10	**SAND:** white (N9), 50% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted, with dark and green fragment lithics. **SANDSTONE:** medium dark gray (N4), medium gray (N5), fine very to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally consolidated with dark and greenish minerals, poor visual porosity. No Oil Show. **CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), locally dark gray (N3), earthy, blocky to subblocky, firm to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, coal, pyrite.	
650 – 680	70 20 10	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted, with dark and green fragments lithics. **SANDSTONE:** medium dark gray (N4), medium gray (N5), fine very to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally consolidated with dark and greenish minerals, poor visual porosity. No Oil Show. **CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), locally dark gray (N3), earthy, blocky to subblocky, firm to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** glauconite, calcite.	
680 – 710	40 30 30	**SAND:** white (N9), 60% fine, 40% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with dark and green fragments lithics. **SANDSTONE:** medium gray (N5), medium light gray (N6), fine very to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally consolidated with dark and greenish minerals, poor visual porosity. No Oil Show. **CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), locally dark gray (N3), earthy, blocky to subblocky, firm to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, shell fragment, pyrite.	
710 – 740	50	**SANDSTONE:** medium dark gray (N4), medium gray (N5), fine very to fine quartz grain, hyaline, translucent, subangular to subrounded,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show.	
	40	**SAND:** white (N9), 60% fine, 30% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with dark and green fragments lithics.	
	10	**CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), locally dark gray (N3), earthy, blocky to subblocky, firm to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, pyrite.	
740 – 770	40	**SANDSTONE:** medium dark gray (N4), medium gray (N5), fine to fine very quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show.	
	40	**SAND:** white (N9), 60% fine, 20% medium, 10% very fine, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted, with dark and green fragments lithics.	
	20	**CLAYSTONE:** olive black (5Y 2/1), brownish gray (5YR 4/1), olive gray (5Y 4/1), medium dark gray (N4), earthy, blocky to subblocky, moderately firm to moderately soft, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, pyrite.	
LOBITOS Mbr (TALARA FORMATION) TOP. AT 785.0 ft. MD (RT); 734.60 ft. TVD (RT)			
770 – 800	70	**CLAYSTONE:** olive black (5Y 2/1), brownish gray (5YR 4/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, amorphous, moderately soft to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	**SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, fair sorted, with dark and green fragments lithics.	
	10	**SANDSTONE:** medium dark gray (N4), medium gray (N5), fine to fine very quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	
800 – 830	100	**CLAYSTONE:** olive black (5Y 2/1), brownish gray (5YR 4/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, amorphous, moderately soft to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), medium gray (N5), fine to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		fine very quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, coal.	
830 – 860	100 Tr	**CLAYSTONE:** olive black (5Y 2/1), brownish gray (5YR 4/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, amorphous, moderately soft to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), fine to fine very quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite.	
860 – 890	100 Tr	**CLAYSTONE:** olive black (5Y 2/1), brownish gray (5YR 4/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, amorphous, moderately soft to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), fine to fine very quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils.	
890 – 920	100 Tr	**CLAYSTONE:** olive black (5Y 2/1), brownish gray (5YR 4/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), fine to fine very quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils.	
920 – 950	100	**CLAYSTONE:** olive black (5Y 2/1), brownish gray (5YR 4/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, dolomite, pyrite, coal, microfossils.	
950 - 968	100	**CLAYSTONE:** olive black (5Y 2/1), brownish gray (5YR 4/1), olive	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, dolomite, pyrite, coal, microfossils.	
968 – 980	90 10	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite.	
980 – 1010	100 Tr	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite.	
1010 – 1040	80 20	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor ilive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, coal.	
1040 – 1070	60 40	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. **Accessories:** calcite, dolomite, coal.	
1070 – 1100	80 20	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils.	
1100 – 1130	80 20	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils.	
1130 – 1160	90 10	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils.	
1160 – 1190	90 10	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, to moderately consolidated, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils.	
1190 – 1220	80 20	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, to moderately consolidated, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils.	
1220 – 1250	80 20	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils.	
1250 – 1280	90 10	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils.	
1280 – 1310	80 20	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils, coal.	
1310 – 1340	90 10	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils, coal.	
1340 – 1370	100 Tr	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils, coal.	
1370 – 1400	100	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, dolomite, microfossils, coal.	
1400 – 1430	100 Tr	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), brownish gray (5YR 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils, coal.	
1430 – 1460	100	**CLAYSTONE:** olive black (5Y 2/1), brownish gray (5YR 4/1), olive gray (5Y 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, moderately soft to moderately firm,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, microfossils, coal.	
1460 – 1490	100 Tr	**CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, subtabular in part, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, coal.	
1490 – 1520	100 Tr	**CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), minor olive gray (5Y 2/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, coal.	
1520 – 1550	100	**CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor medium dark gray (N4), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, dolomite, coal.	
1550 – 1580	100	**CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, dolomite.	
1580 – 1610	100	**CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		slightly calcareous. **Accessories:** calcite, dolomite, coal.	
1610 – 1640	100	**CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, dolomite, coal.	
1640 – 1670	100	**CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, dolomite, coal.	
1670 – 1700	60 30 10	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SAND:** white (N9), very fine to fine, traces medium, quartz grain, hyaline, translucent, subangular to subrounded, fair sorted, with dark lithics. **Accessories:** calcite, dolomite, coal, pyrite.	
1700 – 1730	70 20 10	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark mineralss and glauconite inclusions, poor visual porosity. No Oil Show. **CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SAND:** white (N9), very fine to fine, traces medium, quartz grain, hyaline, translucent, subangular to subrounded, fair sorted, with dark lithics. **Accessories:** calcite, dolomite, coal, pyrite.	
1730 – 1760	50 50	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark mineralss and glauconite inclusions, poor visual porosity. No Oil Show. **CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, dolomite, coal, pyrite.	
1760 – 1790	70 30	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark mineralss and glauconite inclusions, poor visual porosity. No Oil Show. **CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **Accessories:** calcite, dolomite, coal, pyrite.	
1790 – 1820	70 30 Tr	**CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous. **Accessories:** calcite, coal, pyrite.	
1820 – 1850	70 20 10	**CLAYSTONE:** olive black (5Y 2/1), brownish black (5YR 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous. **Accessories:** calcite, coal, pyrite.	
1850 – 1880	80 10	**CLAYSTONE:** olive black (5Y 2/1), mediun dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		(10YR 6/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous.	
	10	**SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous in part.	
	Tr	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show.	
		Accessories: calcite, coal, pyrite.	
1880 – 1910	100	**CLAYSTONE:** olive black (5Y 2/1), mediun dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
		Accessories: calcite, coal, dolomite.	
1910 – 1940	90	**CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	**SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, coal, dolomite.	
1940 – 1970	90	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	**SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, coal, dolomite.	
1970 – 2000	100	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
		Accessories: abundant dolomite, calcite, coal, microfossils.	
2000 – 2030	100	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr Tr	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, coal.	
2030 – 2060	90 10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately hard. **Accessories:** calcite, coal.	
2060 – 2090	90 10 Tr	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately hard. **SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, coal.	
2090 – 2120	80 10 10 Tr	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately hard. **SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, coal.	
2120 – 2150	90	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately hard.	
	Tr	**SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
2150 – 2180	80	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately hard.	
	10	**SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, coal, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL AND SHAVING METALS.**	
2180 – 2210	100	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately hard.	
	Tr	**SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, coal, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL AND SHAVING METALS.**	
2210 – 2240	80 10 10 Tr	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately hard. **SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, coal, pyrite.	
2240 – 2270	90 10 Tr Tr	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately hard. **SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally tight, with dark minerals and glauconite inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, coal, pyrite.	
2270 – 2300	90 10 Tr	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular to subplaty, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately hard. **SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, coal, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
2300 – 2330	100 Tr Tr	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), dark gray (N3), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, occasionally soft, slightly soluble, micromicaceous, microcarbonaceous, non to slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, moderately firm to firm, microcarbonaceous. **SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
2330 – 2360	100 Tr Tr	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), dark gray (N3), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, non to slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, moderately firm to firm, microcarbonaceous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, occasionally moderately consolidated, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, coal.	
2360 – 2390	100 Tr Tr	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), dark gray (N3), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, non to slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, moderately firm to firm, microcarbonaceous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, occasionally moderately consolidated, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, microfossils, coal.	
2390 – 2420	100	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), occasionally dark gray (N3), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, silty in part, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		soluble, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, moderately firm to firm, microcarbonaceous.	
		Accessories: calcite, microfossils, pyrite, coal.	
2420 – 2450	90	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), dark gray (N3), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	10	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, occasionally moderately consolidated, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, moderately firm to firm, microcarbonaceous.	
	Tr	**SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, pyrite, microfossils, coal.	
2450 – 2480	90	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), occasionally dark gray (N3), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, silty in part, slightly soluble, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	10	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, occasionally moderately consolidated, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, moderately firm to firm, microcarbonaceous.	
	Tr	**SILTSTONE:** medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, pyrite, microfossils, coal.	
2480 – 2510	100	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), medium dark gray (N4), occasionally dark yellowish brown (10YR 4/2), earthy to smooth in part, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, occasionally moderately consolidated, with glauconite and dark minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, moderately firm to firm, microcarbonaceous. **Accessories:** calcite, pyrite, coal.	
2510 – 2540	100	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), medium dark gray (N4), occasionally dark yellowish brown (10YR 4/2), earthy to smooth in part, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, occasionally moderately consolidated, with glauconite and dark minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, moderately firm to firm, microcarbonaceous. **Accessories:** calcite, glauconite, pyrite, coal.	
2540 – 2570	100	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), medium dark gray (N4), occasionally dark yellowish brown (10YR 4/2), earthy to smooth in part, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, occasionally moderately consolidated, with glauconite and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, pyrite, glauconite, microfossils.	
2570 – 2600	100	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), minor medium dark gray (N4), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy to smooth in part, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, occasionally silty, slightly soluble, occasionally with glauconite inclusions, micromicaceous, microcarbonaceous, calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, occasionally moderately consolidated, with glauconite and dark minerals inclusions, poor visual porosity. No Oil	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Show. **Accessories:** calcite, dolomite, glauconite.	
2600 – 2630	100 Tr	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), minor medium dark gray (N4), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy to smooth in part, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, occasionally silty, slightly soluble, occasionally with glauconite inclusions, micromicaceous, microcarbonaceous, calcareous. **SANDSTONE:** medium dark gray (N4), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, occasionally moderately consolidated, with glauconite and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, glauconite.	
2630 – 2660	90 10	**CLAYSTONE:** olive black (5Y 2/1), olive gray (5Y 4/1), minor medium dark gray (N4), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy to smooth in part, blocky to subblocky, locally subtabular, amorphous, moderately soft to moderately firm, occasionally silty, slightly soluble, occasionally with glauconite inclusions, micromicaceous, microcarbonaceous, calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, dolomite, glauconite, microfossils.	
2660 – 2690	100 Tr	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, moderately soft to moderately firm, occasionally silty, slightly soluble, occasionally with glauconite inclusions, micromicaceous, microcarbonaceous, calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, dolomite, glauconite.	
2690 – 2720	100 Tr	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, moderately soft to moderately firm, occasionally silty, slightly soluble, occasionally with glauconite inclusions, micromicaceous, microcarbonaceous, calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, dolomite, glauconite, coal.	
2720 – 2750	90 10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, moderately soft to moderately firm, occasionally silty, slightly soluble, occasionally with glauconite inclusions, micromicaceous, microcarbonaceous, calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, dolomite, glauconite, coal, microfossils.	
2750 – 2780	90 10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, moderately firm, locally moderately soft, occasionally silty, slightly soluble, occasionally with glauconite inclusions, micromicaceous, microcarbonaceous, calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, dolomite, glauconite, coal, microfossils.	
2780 – 2810	90 10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, moderately firm, locally moderately soft, occasionally silty, slightly soluble, occasionally with glauconite inclusions, micromicaceous, microcarbonaceous, calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, dolomite, glauconite.	
2810 – 2840	80 20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, moderately firm, locally moderately soft, occasionally silty, slightly soluble, occasionally with glauconite inclusions, micromicaceous, microcarbonaceous, calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, dolomite, glauconite, pyrite.	
CHACRA FM. TOP. AT 2860.0 ft. MD (RT); 2517.60 ft. TVD (RT)			
2840 – 2870	80	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish gray (5YR 4/1), dark yellowish	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		brown (10YR 4/2), earthy, blocky to subblocky, locally subtabular, moderately firm, locally moderately soft, occasionally silty, slightly soluble, occasionally with glauconite inclusions, micromicaceous, microcarbonaceous, calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, dolomite, glauconite.	
2870 – 2900	80	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, dolomite, coal.	
2900 – 2930	80	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, dolomite, shell fragments, coal.	
2930 – 2960	70	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	30	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, dolomite, coal.	
2960 – 2990	60	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	30	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		(10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, limestone.	
2990 – 3020	80 20 Tr	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, limestone.	
3020 – 3050	80 20 Tr	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, limestone.	
3050 – 3080	70 20 10	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, limestone, coal.	
3080 – 3110	80 20	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, limestone, coal.	
3110 – 3140	80	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, subblocky to blocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, limestone, coal.	
3140 – 3170	70	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, limestone, coal.	
3170 – 3200	80	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, limestone, coal.	
3200 – 3230	90	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous.	
		Accessories: calcite, limestone, coal.	
3230 – 3260	90	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), occasionally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous.	
		Accessories: calcite, limestone, coal.	
3260 – 3290	90	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous.	
		Accessories: calcite, limestone, coal.	
3290 – 3320	80	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous.	
		Accessories: calcite, pyrite, limestone, coal.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
3320 – 3350	90 10 Tr	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, pyrite, limestone.	
3350 – 3380	70 20 10	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, pyrite, limestone.	
RIO BRAVO FM. TOP. AT 3405.0 ft. MD (RT); 2890.40 ft. TVD (RT)			
3380 – 3410	90 10 Tr	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, limestone.	NF
3410 – 3440	50	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part,	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	
	30	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, locally friable, with dark minerals inclusions, poor visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, dolomite, shell fragments.	
3440 – 3470	40	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	10
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, micromicaceous, poor to fair visual porosity. **Fluorescence:** 10% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	20	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, shell fragments.	
3470 – 3500	40	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		calcareous.	
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix in part, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, micromicaceous, poor to fair visual porosity.	
	20	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Fluorescence:** 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, shell fragments.	
3500 – 3530	70	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	TR
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix in part, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. **Fluorescence:** Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, limestone.	
3530 – 3560	60	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		calcareous.	
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. **Fluorescence:** 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, dolomite, limestone.	
3560 – 3590	60	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	TR
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity.	
	10	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Fluorescence:** Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **Accessories:** calcite, shell fragments	
3590 – 3614	70	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	NF
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. No Oil Show.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous.	
		Accessories: calcite, shell fragments, pyrite.	
3614 – 3625	80	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	NF
	10	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. No Oil Show.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**SAND:** white (N9), fine to very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
		Accessories: calcite.	
		NOTE: SAMPLE CONTAMINATED WITH 50% CEMENT.	
3625 – 3650	60	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	NF
	30	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous.	
	Tr	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally moderately consolidated,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		with dark minerals inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH 10% CEMENT, CHEMICAL AND SHAVING METALS.**	
3650 – 3680	60 40 Tr Tr	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH 5% CEMENT, CHEMICAL AND SHAVING METALS.**	NF
3680 – 3710	60 30 10 Tr Tr	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **SAND:** white (N9), 50% fine, 30% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale yellowish brown (10YR 6/2), earthy, blocky to subblocky, firm to moderately firm, microcarbonaceous. **SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL AND SHAVING METALS.**	NF

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
3710 – 3740	60 20 10 10	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments, dolomite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL AND SHAVING METALS.**	NF
3740 – 3770	70 20 10 Tr	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 4/1), olive black (5Y 2/1), locally brownish gray (5YR 4/1), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals and glauconite inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. No Oil Show. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, shell fragments, dolomite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL AND SHAVING METALS.**	NF
3770 - 3800	80 10	**CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), locally brownish gray (5YR 4/1), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine	NF

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals and glauconite inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments, dolomite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL AND SHAVING METALS.**	
3800 – 3830	40	**CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), locally brownish gray (5YR 4/1), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	TR
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals and glauconite inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. **Fluorescence:** Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	20	**SAND:** white (N9), 50% fine, 30% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, dolomite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL AND SHAVING METALS.**	
3830 – 3860	50	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	10
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals and glauconite inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. **Fluorescence:** 10% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	20	**CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **Accessories:** calcite, shell fragments, dolomite, pyrite.	
3860 – 3890	60 30 10	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals and glauconite inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. **Fluorescence:** 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, shell fragments, dolomite, pyrite.	5
3890 – 3920	50 20 20 10	**CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals and glauconite inclusions, microcarbonaceous in part, micromicaceous, poor visual porosity. No Oil Show. **SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, dolomite, pyrite.	NF
3920 - 3950	40 30	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals and glauconite inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		light.	
	20	**CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, dolomite, pyrite.	
3950 – 3980	70	**SAND:** white (N9), 50% fine, 20% very fine, 30% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	10
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals and glauconite inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 10% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous. **Accessories:** calcite, shell fragments, pyrite.	
3980 – 4010	40	**SANDSTONE:** medium gray (N5), medium dark gray (N4), locally medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals and glauconite inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	TR
	30	**CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	
	20	**SAND:** white (N9), 50% fine, 20% very fine, 30% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	
4010 – 4040	40	**SANDSTONE:** medium gray (N5), medium dark gray (N4), locally medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, locally consolidated, with dark minerals and glauconite inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 20% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	20
	30	**SAND:** white (N9), 50% fine, 20% very fine, 30% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	**CLAYSTONE:** olive black (5Y 2/1), medium dark gray (N4), olive gray (5Y 4/1), locally brownish gray (5YR 4/1), dark yellowish brown (10YR 4/2), earthy, blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, slightly soluble, micromicaceous, microcarbonaceous, slightly to non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	
4040 – 4070	50	**SAND:** white (N9), 50% very fine, 50% fine, quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	30
	30	**SANDSTONE:** medium gray (N5), medium dark gray (N4), locally medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, with dark minerals and glauconite inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 30% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), occasionally dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: pyrite, calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4070 – 4100	30 30 20 20	**SANDSTONE:** medium gray (N5), medium dark gray (N4), locally medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, with dark minerals and glauconite inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), occasionally dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SAND:** white (N9), 50% very fine, 50% fine, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	5
4100 – 4130	30 30 20 20	**SANDSTONE:** medium gray (N5), medium dark gray (N4), locally medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, with dark minerals and glauconite inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), occasionally dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, dolomite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	5
4130 – 4160	40	**SANDSTONE:** medium gray (N5), medium dark gray (N4), locally medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable,	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		locally moderately consolidated, with dark minerals and glauconite inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	30	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), occasionally dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, pyrite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4160 – 4190	40	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	NF
	30	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), occasionally dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	20	**SANDSTONE:** medium gray (N5), medium dark gray (N4), locally medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, with dark minerals and glauconite inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4190 – 4220	30	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), occasionally dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	NF
	30	**SANDSTONE:** medium gray (N5), medium dark gray (N4), locally medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, with dark minerals and glauconite inclusions, microcarbonaceous in part, poor visual porosity. No Oil	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Show.	
	30	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4220 – 4250	50	**SANDSTONE:** medium gray (N5), medium light gray (N6), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	TR
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	20	**SAND:** white (N9), 50% very fine, 50% fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4250 – 4280	30	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	TR
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	**SAND:** white (N9), 50% very fine, 50% fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4280 – 4310	30 30 20 20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), medium light gray (N6), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **SAND:** white (N9), 50% very fine, 50% fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** shell fragments, calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	NF
4310 – 4340	40 20 20 20	**SANDSTONE:** medium gray (N5), medium light gray (N6), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **Accessories:** shell fragments, calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	NF
4340 – 4370	50 20	**SANDSTONE:** medium gray (N5), medium light gray (N6), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine	NF

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		sandstone, slightly calcareous.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **Accessories:** shell fragments, calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4370 – 4400	50	**SANDSTONE:** medium gray (N5), medium light gray (N6), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	NF
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** shell fragments, calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4400 – 4430	60	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	50
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 50% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** shell fragments, calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4430 – 4460	70	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair	50

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		sorted.	
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 50% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** shell fragments, calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4460 – 4490	60	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	50
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 50% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N4), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** shell fragments, calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4490 – 4520	50	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	30
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 30% pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		dark gray (N3), olive gray (5Y 4/1), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** shell fragments, calcite, pyrite, slickenside, milonite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4520 – 4550	60 30 10	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, slightly calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** 40% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **Accessories:** shell fragments, calcite, pyrite, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	40
4550 – 4580	60 30 10	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, slightly calcareous cement in part, friable to moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** 60% pin point gold yellow natural fluorescence, slow, weak, pal, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	60
4580 – 4610	70 20	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, slightly calcareous cement in part, friable to moderately friable, with dark minerals inclusions,	30

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** 30% pin point pale yellow natural fluorescence, slow, weak, pal, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4610 – 4640	70	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	20
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, slightly calcareous cement in part, friable to moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** 20% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4640 – 4670	60	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces corse quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	30
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, slightly calcareous cement in part, friable to moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** 30% pin point pale yellow natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **Accessories:** shell fragments, calcite, milonite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4670 – 4700	60	**SAND:** white (N9), 50% fine, 30% medium, 20% very fine, traces corse quartz grain, hyaline, translucent, subangular to subrounded,	35

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		fair sorted.	
	30	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, slightly calcareous cement in part, moderately friable to friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** 35% pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **Accessories:** shell fragments, calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4700 – 4730	50	**SAND:** white (N9), 50% fine, 30% medium, 20% very fine, traces corse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	20
	30	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, slightly calcareous cement in part, moderately friable to friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** 20% pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **Accessories:** shell fragments, calcite, milonite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4730 – 4760	40	**SANDSTONE:** medium gray (N5), medium light gray (N6), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable, locally friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity.	10
	30	**SAND:** white (N9), 50% fine, 30% medium, 20% very fine, traces corse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. **Fluorescence:** 10% pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** shell fragments, calcite, milonite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4760 – 4790	40	**SANDSTONE:** medium gray (N5), medium light gray (N6), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable, locally friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity.	5
	30	**SAND:** white (N9), 50% fine, 30% medium, 20% very fine, traces corse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. **Fluorescence:** 5% pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** shell fragments, calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4790 – 4820	40	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	5
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable, friable in part, locally tight, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity.	
	20	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces corse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. **Fluorescence:** 5% pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		sandstone, slightly calcareous. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4820 – 4850	40 30 30 Tr	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces corse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable, friable in part, locally tight, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 5% pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	5
4850 – 4880	60 20 20 Tr	**SAND:** white (N9), 50% fine, 30% medium, 20% very fine, traces corse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), minor medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable, friable in part, locally tight, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** shell fragments, calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	TR
4880 – 4910	80	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair	25

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		sorted.	
	10	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, friable to moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** 25% pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	10	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4910 – 4940	60	**SAND:** white (N9), 50% fine, 30% medium, 20% very fine, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	25
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, friable to moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** 25% pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **Accessories:** shell fragments, calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
4940 – 4970	70	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	5
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	10	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, friable to moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** 5% pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **Accessories:** shell fragments, calcite, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
4970 – 5000	50 30 20 Tr	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	TR
5000 – 5030	60 20 20 Tr	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	TR
5030 – 5060	60	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		sorted.	
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5060 – 5090	40	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	TR
	30	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	20	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5090 – 5120	40	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Fluorescence: traces pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light.	
	30	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	20	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
5120 – 5150	50	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	NF
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular to sublaminar in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
5150 – 5180	40	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	NF
	30	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5180 – 5210	40 20 30 10	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular to sublaminar in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	NF
5210 – 5240	40 30 20 10	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular to sublaminar in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	NF
5240 - 5256	60 20	**SAND:** white (N9), 50% fine, 40% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable,	NF

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally tight, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular to sublaminar in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
5256 – 5270	70	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	NF
	10	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular to sublaminar in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
5270 – 5300	70	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	NF
	10	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, subtabular to sublaminar in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
		Accessories: calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
5300 – 5330	50	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	NF
	30	**SANDSTONE:** medium light gray (N6), light gray (N7), minor	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, sublaminar to subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5330 – 5360	50	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	NF
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, sublaminar to subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5360 – 5390	40	**CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, sublaminar to subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	NF
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), minor light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
5390 – 5420	60 30 10 Tr	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, sublaminar to subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), medium light gray (N6), minor light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	NF
5420 – 5450	50 30 20 Tr	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), minor light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), blocky to subblocky, sublaminar to subtabular in part, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	NF
5450 – 5480	40 30 30	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **CLAYSTONE:** medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), occasionally olive gray (5Y 4/1), blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SANDSTONE:** medium gray (N5), medium light gray (N6), minor light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity.	NF

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5480 – 5510	40 30 20 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), occasionally dusky yellwish brown (10YR 2/2), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), medium dark gray (N4), minor light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, occasionally micromicaceous, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** pyrite, calcite, dolomite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	NF
5510 – 5540	40 20 20 20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), occasionally dusky yellwish brown (10YR 2/2), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), medium dark gray (N4), minor light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, occasionally micromicaceous, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** pyrite, calcite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	NF
5540 – 5570	50	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), occasionally dusky yellwish brown (10YR 2/2), earthy in part, blocky to subblocky, subtabular in part, occasionally	NF

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium gray (N5), medium light gray (N6), medium dark gray (N4), minor light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, occasionally micromicaceous, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5570 – 5600	40	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	NF
	30	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium gray (N5), medium light gray (N6), medium dark gray (N4), minor light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, occasionally micromicaceous, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5600 – 5630	50	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	NF
	20	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium gray (N5), medium light gray (N6), medium dark gray (N4), minor light gray (N7), very fine to fine quartz grain,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, occasionally micromicaceous, poor visual porosity. No Oil Show. **Accessories:** pyrite, calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5630 – 5660	50 20 20 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium gray (N5), medium light gray (N6), medium dark gray (N4), minor light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, occasionally micromicaceous, poor visual porosity. No Oil Show. **Accessories:** pyrite, calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	NF
5660 – 5690	40 30 20 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), medium dark gray (N4), minor light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark minerals inclusions, microcarbonaceous in part, occasionally micromicaceous, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** pyrite, calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	NF
5690 – 5720	50 30	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6),	NF

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable, locally moderately consolidated, with dark minerals inclusions, microcarbonaceous in part, poor to fair visual porosity. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
PALEGREDA FM. TOP. AT 5736.0 ft. MD (RT); 4479.08 ft. TVD (RT)			
5720 – 5750	40	**SANDSTONE:** medium gray (N5), medium dark gray (N4), medium light gray (N6), occasionally light gray (N7), fine to very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	30	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted..	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** pyrite, calcite, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5750 – 5780	30	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SILTSTONE:** medium gray (N5), medium dark gray (N4), occasionally medium dark gray (N3), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	30	**SANDSTONE:** medium gray (N5), medium dark gray (N4), medium	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** pyrite, calcite, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5780 – 5798	40	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SILTSTONE:** medium gray (N5), medium dark gray (N4), occasionally medium dark gray (N3), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	20	**SANDSTONE:** medium gray (N5), medium dark gray (N4), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.. **Accessories:** pyrite, calcite, dolomite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5798 – 5810	70	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), occasionally medium dark gray (N3), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium gray (N5), medium dark gray (N4), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	Tr	**SAND:** white (N9), fine to very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted..	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, dolomite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5810 – 5840	60 20 20 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), occasionally medium dark gray (N3), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium gray (N5), medium dark gray (N4), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show. **SAND:** white (N9), fine to very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.. **Accessories:** calcite, dolomite.	
5840 – 5870	50 30 20 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), occasionally medium dark gray (N3), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium gray (N5), medium dark gray (N4), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show. **SAND:** white (N9), fine to very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.. **Accessories:** calcite, dolomite.	
5870 – 5900	60 30	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy in part, blocky to subblocky, subtabular in part, occasionally sublaminar, moderately firm, minor moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium gray (N5), medium dark gray (N4), medium light gray (N6) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	Tr	**SAND:** white (N9), fine to very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.. **Accessories:** calcite, dolomite.	
5900 – 5930	80	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy in part, subblocky to blocky, subtabular in part to sublaminar, moderately firm, minor moderately soft, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	Tr	**SANDSTONE:** medium gray (N5), medium dark gray (N4), medium light gray (N6) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	Tr	**SAND:** white (N9), fine to very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, dolomite, pyrite.	
5930 – 5960	80	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy in part, subblocky to blocky, subtabular in part to sublaminar, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	Tr	**SANDSTONE:** medium gray (N5), medium dark gry (N4), medium light gray (N6) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	Tr	**SAND:** white (N9), fine to very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, dolomite, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
5960 – 5990	90 10 Tr Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy in part, subblocky to blocky, subtabular in part to sublaminar, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium gray (N5), medium dark gry (N4), medium light gray (N6) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show. **SAND:** white (N9), fine to very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, dolomite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
5990 - 6000	90 10 Tr Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium gray (N5), medium dark gry (N4), medium light gray (N6) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6000 – 6010	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	**SANDSTONE:** medium gray (N5), medium dark gry (N4), medium light gray (N6) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6010 – 6020	90	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	Tr	**SANDSTONE:** medium gray (N5), medium dark gry (N4), medium light gray (N6) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part.	
	Tr	**SAND:** white (N9), fine to very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6020 – 6030	80	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	Tr	**SANDSTONE:** medium gray (N5), medium dark gray (N4), medium light gray (N6) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		No Oil Show. **Accessories:** calcite, dolomite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6030 – 6040	90 10 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium gray (N5), medium dark gray (N4), medium light gray (N6) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6040 – 6050	80 20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, dolomite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6050 – 6060	80 20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, dolomite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6060 – 6070	80 20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6070 – 6080	80	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6080 – 6090	80	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6090 – 6100	80	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
6100 – 6110	80 20 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm, minor moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6110 – 6120	80 20 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6120 – 6130	80 20 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, dolomite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6130 – 6140	80 20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, dolomite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
6140 – 6150	80 20 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6150 – 6160	90 10 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6160 – 6170	90 10 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6170 – 6180	80 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6180 – 6190	80 10 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6190 - 6200	80 10 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, locally with pyrite inclusions, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6200 – 6210	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, locally with pyrite inclusions, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite, dolomite.	
6210 - 6220	80	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, locally with pyrite inclusions, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite.	
6220 – 6230	90 10 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, locally with pyrite inclusions, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite.	
6230 – 6240	80 10 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, locally with pyrite inclusions, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite.	
6240 – 6250	90 10 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, locally with pyrite inclusions, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite.	
6250 – 6260	70	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 10	to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, locally with pyrite inclusions, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6260 – 6270	80 10 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, locally with pyrite inclusions, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6270 – 6280	80 10 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), occasionally grayish black (N2), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, locally with pyrite inclusions, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6280 – 6290	80 10 10	**CLAYSTONE:** olive gray (5Y 2/1), olive black (5Y 2/1), minor medium dark gray (N4), dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6290 – 6300	80 10 10 Tr	**CLAYSTONE:** olive gray (5Y 2/1), olive black (5Y 2/1), minor medium dark gray (N4), dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6300 – 6310	80 10 10 Tr	**CLAYSTONE:** olive gray (5Y 2/1), olive black (5Y 2/1), minor medium dark gray (N4), dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, poor visual porosity. No Oil Show. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6310 – 6320	80 10	**CLAYSTONE:** olive gray (5Y 2/1), olive black (5Y 2/1), minor medium dark gray (N4), occasionally grayish black(N2), dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6320 – 6330	70	**CLAYSTONE:** olive gray (5Y 2/1), olive black (5Y 2/1), minor medium dark gray (N4),occasionally grayish black(N2), dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, dirty in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
MOGOLLON FM. TOP. AT 6330.0 ft. MD (RT); 4899.64 ft. TVD (RT)			
6330 – 6340	80	**CLAYSTONE:** olive gray (5Y 2/1), olive black (5Y 2/1), minor medium dark gray (N4),occasionally grayish black(N2), dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		dirty in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6340 – 6350	80	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6350 – 6360	80	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable, occasionally moderately consolidated, dirty in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6360 – 6370	80	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable, occasionally moderately consolidated, dirty in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6370 – 6380	60	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine, minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6380 – 6390	60	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine, minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
6390 – 6400	40 30 30 Tr	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine, minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6400 – 6410	50 30 20 Tr	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine, minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6410 – 6420	30 30	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	30	**SAND:** white (N9), 60% fine, 40% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine, minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	Tr	**DOLOMITE:** dark yellowish brown (10YR 4/2), pale brown (5YR 5/2), earthy, blocky to subblocky, firm to moderately hard, microcarbonaceous in part. **Accessories:** calcite, pyrite, limestone, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6420 – 6430	40	**SAND:** white (N9) 70% fine, 30% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	30	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine, minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments, pyrite, dolomite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6430 – 6440	50	**SAND:** white (N9) 70% fine, 30% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments, pyrite, dolomite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6440 – 6450	50 20 20 10	**SAND:** white (N9), 70% fine, 30% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine, minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments, pyrite, dolomite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6450 – 6460	50 20 20 10	**SAND:** white (N9), 70% fine, 30% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine, minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments, pyrite, dolomite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6460 – 6470	60 20	**SAND:** white (N9) 70% fine, 30% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine, minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
		Accessories: calcite, shell fragments, pyrite, dolomite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
6470 – 6480	60	**SAND:** white (N9), 70% fine, 30% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine, minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
		Accessories: calcite, shell fragments, pyrite, dolomite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
6480 – 6490	60	**SAND:** white (N9), 70% fine, 30% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments, pyrite, dolomite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6490 – 6500	70 10 10 10	**SAND:** white (N9), 60% fine, 40% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show. **CLAYSTONE:** medium dark gray (N4), olive gray (5Y 2/1), occasionally dark gray (N3), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine, minor fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, shell fragments.	
6500 – 6510	70 10 10 10	**SAND:** white (N9), 60% fine, 40% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, shell fragments.	
6500 – 6520	60 20	**SAND:** white (N9), 70% fine, 30% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6520 – 6530	50	**SAND:** white (N9), 70% fine, 30% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6530 – 6540	50	**SAND:** white (N9), 70% fine, 30% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, dolomite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6540 – 6550	60 20 20 10	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	
6550 – 6560	60 20 20 10	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	
6560 – 6570	70 20	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6570 – 6580	80	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments.	
6580 – 6590	80	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6590 – 6600	70 20 10 Tr	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	TR
6600 – 6610	60 20 20 Tr	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6610 – 6620	60 20 20 Tr	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** traces pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	TR
6620 – 6630	60 20 20 Tr	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. No Oil Show. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Fluorescence:** 10% pin point pale yellow natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	10

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
6630 – 6640	70 20 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 20% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite.	20
6640 – 6650	80 10 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **Accessories:** calcite, shell fragments, pyrite.	10
6650 – 6660	70 20 10	**SAND:** white (N9), 80% fine, 10% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 25% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **Accessories:** calcite, shell fragments, pyrite. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally	25

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
6660 – 6670	70 20 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 25% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite.	25
6670 – 6680	80 10 10	**SAND:** white (N9), 80% fine, 10% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite.	10
6680 – 6690	70 20	**SAND:** white (N9), 80% fine, 10% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 20% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut	20

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6690 – 6700	70	**SAND:** white (N9), 80% fine, 10% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	15
	20	**SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6700 – 6710	60	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	10
	30	**SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6710 – 6720	70	**SAND:** white (N9), 70% fine, 10% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	15
	20	**SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6720 – 6730	70	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	15
	20	**SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	
6730 – 6740	60	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	20
	30	**SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 20% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	
6740 – 6750	70	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	20

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	**SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 20% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	
6750 – 6760	60	**SAND:** white (N9), 80% fine, 10% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	15
	20	**SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	
6760 – 6770	60	**SAND:** white (N9), 80% fine, 10% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	20
	20	**SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 20% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	
6770 – 6780	80 10 10	**SAND:** white (N9), 80% fine, 10% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	10
6780 - 6790	80 10 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 20% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	20
6790 – 6800	50 30	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	15

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	
6800 -6810	70 20 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	10
6810 – 6820	70 20 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	10
6820 – 6830	40 30 20	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), occasionally light gray (N7),	15

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	
6830 – 6840	40	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	15
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	
6840 – 6850	70	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	30
	20	**SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 30% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive gray (5Y 2/1), earthy in part, subblocky to blocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, coal.	
6850 – 6860	70 20 10 Tr	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair to well sorted. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 20% pin point pale yellowish white natural fluorescence, fast, faint, pale to bright, blooming, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite, shell fragments.	20
6860 – 6870	70 10 10 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 20% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous,	20

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite, shell fragments.	
6870 – 6880	60 20 10 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), occasionally light gray (N7), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite, shell fragments.	10
6880 – 6890	70 20 10 Tr	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), occasionally medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, pyrite, shell fragments.	
6890 – 6900	70 10 10 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), occasionally medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite, shell fragments.	5
6900 – 6910	60 20 10 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), occasionally medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	10

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
6910 – 6920	50 20 20 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), occasionally medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite, slickenside.	10
6920 – 6930	50 20 20 10	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), occasionally medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite, slickenside.	5
6930 – 6940	70	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded,	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally angular, well sorted.	
	10	**SANDSTONE:** medium light gray (N6), light gray (N7), occasionally medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6940 – 6950	60	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	5
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), occasionally medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6950 – 6960	50	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	5
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), occasionally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarse argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6960 – 6970	40	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	5
	30	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6970 – 6980	30	**SAND:** white (N9), 50% fine, 20% very fine, 20% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	5
	30	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	
6980 – 6990	40	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	TR
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** traces pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
6990 – 7000	50	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	TR
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** traces pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7000 – 7010	50	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	TR
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** traces pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7010 – 7020	40	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show.	
	30	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
		Accessories: abundant calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7020 – 7030	50	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
		Accessories: abundant calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7030 – 7040	60	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments, pyrite, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7040 – 7050	50 20 20 10	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7050 – 7060	50 20 20 10	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		calcareous. **Accessories:** calcite, shell fragments, pyrite.	
7060 – 7070	40 30 20 10	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), occasionally grayish black (N2), olive black (5Y 2/1), earthy in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	
7070 – 7080	70 10 10 10	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. No Oil Show. **SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite.	
7080 – 7090	50 20	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. No Oil Show. **SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite, shell fragments.	
7090 – 7100	30	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show.	
	30	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite, shell fragments.	
7100 – 7110	30	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show.	
	30	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite, shell fragments.	
7110 – 7120	30 30 20 20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite.	
7120 – 7130	30 30 20 20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite.	
7130 – 7140	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. **Fluorescence:** traces pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **Accessories:** calcite, shell fragments, pyrite.	
7140 – 7150	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **Accessories:** calcite, pyrite.	
7150 – 7160	30	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show.	
	30	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite.	
7160 – 7170	40	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **Accessories:** calcite, pyrite, shell fragments.	
7170 – 7180	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	30	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally.	
	20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		micropyritic, grading to very fine sandstone, slightly calcareous.	
	20	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show.	
		Accessories: calcite, pyrite, shell fragments.	
7180 – 7190	30	**SAND:** white (N9) 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	TR
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity.	
		Fluorescence: traces pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally, micropyritic, grading to very fine sandstone, slightly calcareous.	
	20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous, micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, pyrite, shell fragments.	
7190 – 7200	40	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally, micropyritic, grading to very fine sandstone, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		calcareous. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7200 – 7210	40 30 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally, micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7210 – 7220	40 20 20 20	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **Accessories:** abundant calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7220 – 7230	40	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 20 20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7230 – 7240	30 30 20 20	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7240 – 7250	40 20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		calcareous.	
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7250 – 7260	40	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7260 – 7270	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 70% fine, 10% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7270 – 7280	40	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	5
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**SAND:** white (N9), 60% fine, 20% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7280 – 7290	40	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	5
	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SAND:** white (N9), 80% fine, 10% very fine, 10% medium, traces	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7290 – 7300	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	10
	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SAND:** white (N9), 80% fine, 10% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7300 – 7310	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	10
	30	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	
	20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7310 – 7320	40	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	15
	30	**SAND:** white (N9), 80% fine, 10% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	
	20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7320 – 7330	40	**SAND:** white (N9), 80% fine, 10% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	15
	30	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		residual ring at natural light. P-FOS.	
	20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7330 – 7340	50	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity.	10
		Fluorescence: 10% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	
	20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7340 – 7350	50	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	10
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity.	
		Fluorescence: 10% pin point pale yellowish white natural	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7350 – 7360	70	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	10
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity.	
		Fluorescence: 10% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
		Accessories: abundant calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7360 – 7370	70	**SAND:** white (N9), 50% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	5
	20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity.	
		Fluorescence: 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7370 – 7380	70 20 10	**SAND:** white (N9), 50% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	10
7380 – 7390	60 20 20	**SAND:** white (N9), 60% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7390 – 7400	50 30 20	**SAND:** white (N9), 60% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	5
7400 – 7410	60 20 20	**SAND:** white (N9), 60% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	5
7410 – 7420	50 30	**SAND:** white (N9), 60% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7420 – 7430	40 30	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** Traces pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **SAND:** white (N9), 60% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	TR
	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7430 – 7440	40 30 30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. No Oil Show. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **Accessories:** abundant calcite, shell fragments, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7440 – 7450	40 30 30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 60% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	15
7450 – 7460	50 30 20	**SAND:** white (N9), 60% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	15
7460 – 7470	50	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic,	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		poor visual porosity. **Fluorescence:** Traces pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **SAND:** white (N9), 60% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7470 – 7480	50 30 20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **SAND:** white (N9), 60% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	15
7480 – 7490	40 30	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 15% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	15

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7490 - 7500	50 30 20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 10% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 60% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	10
7500 – 7510	50 30 20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 60% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7510 - 7520	50 30 20	**SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	5
7520 – 7530	40 30 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **SANDSTONE:** medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. **Fluorescence:** 5% pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite.	5
7530 – 7540	40 30	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), minor	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, abundant calcareous cement in part, moderately friable, minor moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant shell fragments and calcite, pyrite, slickenside.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7540 – 7550	40	**SAND:** white (N9), 70% fine, 20% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well to fair sorted.	TR
	30	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, abundant calcareous cement in part, moderately friable, minor moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity.	
		Fluorescence: traces pin point pale yellowish white natural fluorescence, slow, faint, pale, even, whitish yellow cut fluorescence, whitish yellow residual ring under U. V. light, non residual ring at natural light. P-FOS.	
	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant shell fragments and calcite, pyrite, slickenside.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7550 – 7560	60	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted sorted.	
	30	**SANDSTONE:** medium light gray (N6), light gray (N7), minor	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, abundant calcareous cement in part, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant shell fragments and calcite, pyrite, slickenside.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7560 – 7570	70	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted sorted.	
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, abundant calcareous cement in part, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant shell fragments and calcite, slickenside.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7570 – 7580	70	**SAND:** white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted sorted.	
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, abundant calcareous cement in part, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		porosity. No Oil Show.	
	10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant shell fragments and calcite, slickenside.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7580 – 7590	80	**SAND:** white (N9), 60% fine, 40% very fine, traces medium to coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted sorted.	
	10	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: shell fragments, calcite, slickenside.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7590 – 7600	70	**SAND:** white (N9), 60% fine, 40% very fine, traces medium to coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted sorted.	
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
		Accessories: shell fragments, calcite, slickenside.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	

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INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7600 – 7610	60 20 20	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** shell fragments, calcite, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7610 – 7620	80 10 10	**SAND:** white (N9) 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted sorted. **SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7620 – 7630	70 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted sorted. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7630 – 7640	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant calcite, shell fragments.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7640 – 7650	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant calcite, shell fragments.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7650 – 7660	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally micropyritic, poor visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant calcite, shell fragments.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7660 – 7670	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: abundant calcite, shell fragments.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7670 – 7680	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium light gray (N6), light gray (N7), minor medium gray (N5) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, calcareous cement, moderately friable to friable, occasionally moderately consolidated, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		calcareous. **Accessories:** abundant calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7680 – 7690	40 30 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7690 -7700	40 30 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7700 – 7710	40	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30 20 10	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7710 – 7720	50 20 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7720 – 7730	50 20 20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally micropyritic, poor visual porosity. No Oil Show.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7730 – 7740	60	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7740 – 7750	60	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	10	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7750 – 7760	60 20 10 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7760 – 7770	50 30 20 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** abundant calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7770 – 7780	50 30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 Tr	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7780 – 7790	40 40 10 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7790 - 7800	40 40 10 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7800 – 7810	50 30 20 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7810 – 7820	50 30 20 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7820 – 7830	50 20 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7830 – 7840	60 20 20 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SILTSTONE:** medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7840 – 7850	60 20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, shell fragments, pyrite, coal.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7850 – 7860	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	20	**SAND:** white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
		Accessories: calcite, shell fragments, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.	
7860 – 7870	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7870 – 7880	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7880 – 7890	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	Tr	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7890 – 7900	50 30 10 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy to smooth in part, blocky to subblocky, minor sublaminar, occasionally subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), minor light gray (N7) very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7900 – 7910	40 30 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 70% fine, 30% very fine, quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **Accessories:** calcite, pyrite, shell fragments, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7910 – 7920	40	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	30	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), 70% fine, 30% very fine, quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **Accessories:** calcite, pyrite, shell fragments, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7920 – 7930	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	30	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), 70% fine, 30% very fine, quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **Accessories:** calcite, pyrite, shell fragments, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7930 – 7940	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	40	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, shell fragments, coal, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7940 – 7950	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	40	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	10	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7950 – 7960	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	
	50	**SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous.	
	Tr	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, shell fragments, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7960 – 7970	50 40 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7970 – 7980	50 30 20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SILTSTONE:** medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous in part, moderately firm, occasionally moderately soft, micromicaceous, microcarbonaceous, occasionally micropyritic, grading to very fine sandstone, slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7980 – 7990	40 40 20	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
7990 - 8000	40 30 30	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8000 – 8010	40 30 30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8010 – 8020	40 30 30	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, pyrite, shell fragments, pyrite, coal, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8020 – 8030	40 30 30	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8030 – 8040	50 30 20	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8040 – 8050	50 30 20	**SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8050 – 8060	50 30 20	**SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8060 – 8070	50 30 20	**SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8070 – 8080	40 40 20	**SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8080 – 8090	50 30 20	**SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8090 – 8100	50 30 20	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8100 – 8110	40 40 20	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8110 – 8114	50 40 10	**SAND:** white (N9), 100% fine quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and green minerals inclusions, microcarbonaceous in part, occasionally micropyritic, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, pyrite, shell fragments, pyrite, coal, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8114 – 8120	80 10 10	**SAND:** white (N9), 90% fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, scarse calcareous cement, friable to moderately friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, coal. **NOTE: SAMPLE CONTAMINATED WITH CEMENT AND CHEMICAL MUD.**	
8120 – 8130	90 10 Tr	**SAND:** white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, scarse calcareous cement, friable to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		moderately friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, coal. **NOTE: SAMPLE CONTAMINATED WITH CEMENT AND CHEMICAL MUD.**	
8130 – 8140	100 Tr Tr	**SAND:** white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, scarse calcareous cement, friable to moderately friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8140 – 8150	80 20	**SAND:** white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, shell fragments, slickenside, coal. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8150 – 8160	60 20 20	**SAND:** white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, scarse calcareous cement, friable to moderately friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor sublaminar to subplaty, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, shell fragments, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8160 – 8170	60 20	**SAND:** white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, scarse calcareous cement, friable to moderately friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **Accessories:** calcite, abundant slickenside, shell fragments, milonite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8170 – 8180	50 40 10	**SAND:** white (N9), 90% fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, scarse calcareous cement, friable to moderately friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, slickenside, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8180 – 8190	40 40 20	**SAND:** white (N9), 90% fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, scarse calcareous cement, friable to moderately friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, milonite, slickenside, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8190 – 8200	60 20	**SAND:** white (N9), 90% fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	**SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, scarse calcareous cement, friable to moderately friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8200 – 8210	50 30 20	**SAND:** white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, minor subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, scarse calcareous cement, friable to moderately friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8210 – 8220	70 20 10	**SAND:** white (N9), 90% fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, minor subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, scarse calcareous cement, friable to moderately friable, with dark and green minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
SAN CRISTOBAL FM. TOP. AT 8229.0 ft. MD (RT); 6200.51 ft. TVD (RT)			
8220 – 8230	70 20 10	**SAND:** white (N9), 90% fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, minor subtabular, moderately firm to moderately soft, locally firm, locally silty, micromicaceous, microcarbonaceous, non to slightly calcareous. **SANDSTONE:** medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, scarse calcareous cement, friable to moderately friable, with dark and green minerals inclusions,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, shell fragments. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL MUD.**	
8230 – 8240	60 30 10	**SAND:** white (N9), 90% fine, 10% very fine, traces medium quartz grain, hyaline, translucent, subangular to angular, well sorted. **CLAYSTONE:** medium light gray (N6), medium gray (N5), very light gray (N8), earthy, blocky to subblocky, minor sublaminar, soft, very soluble, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, slightly calcareous cement, friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
8240 – 8250	50 50 Tr	**SAND:** white (N9), 100% very fine quartz grain, hyaline, translucent, angular to subangular, well sorted. **CLAYSTONE:** medium light gray (N6), medium gray (N5), very light gray (N8), earthy, blocky to subblocky, minor sublaminar, soft, very soluble, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, slightly calcareous cement, friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
8250 – 8260	60 40	**CLAYSTONE:** medium light gray (N6), medium gray (N5), very light gray (N8), earthy, blocky to subblocky, minor sublaminar, soft, very soluble, non calcareous. **SAND:** white (N9), 100% very fine quartz grain, hyaline, translucent, angular to subangular, well sorted. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
8260 – 8270	70 30	**CLAYSTONE:** medium light gray (N6), medium gray (N5), very light gray (N8), earthy, blocky to subblocky, minor sublaminar, soft, very soluble, non calcareous. **SAND:** white (N9), 100% very fine quartz grain, hyaline, translucent, angular to subangular, well sorted. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
8270 – 8280	70 30	**CLAYSTONE:** medium light gray (N6), medium gray (N5), very light gray (N8), earthy, blocky to subblocky, minor sublaminar, soft, very soluble, non calcareous. **SAND:** white (N9), 100% very fine quartz grain, hyaline, translucent, angular to subangular, well sorted. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
8280 – 8290	70 20 10	**CLAYSTONE:** medium light gray (N6), medium gray (N5), very light gray (N8), earthy, blocky to subblocky, minor sublaminar, soft, very soluble, non calcareous. **SAND:** white (N9), 100% very fine quartz grain, hyaline, translucent, angular to subangular, well sorted. **SANDSTONE:** medium light gray (N6), very fine quartz grain,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		subangular to subrounded, well sorted, argillaceous matrix, friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
8290 – 8300	80 20	**CLAYSTONE:** medium light gray (N6), medium gray (N5), very light gray (N8), earthy, amorphous, minor sublaminar, soft, very soluble, non calcareous. **SAND:** white (N9), 100% very fine quartz grain, hyaline, translucent, angular to subangular, well sorted.	
8300 – 8310	80 20	**CLAYSTONE:** medium light gray (N6), medium gray (N5), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, microcarbonaceous, non calcareous. **SAND:** white (N9), 100% very fine quartz grain, hyaline, translucent, angular to subangular, well sorted, loose.	
8310 – 8320	70 30	**CLAYSTONE:** medium light gray (N6), medium gray (N5), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8320 – 8330	100 Tr	**CLAYSTONE:** medium light gray (N6), medium gray (N5), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8330 – 8340	80 20	**CLAYSTONE:** medium light gray (N6), medium gray (N5), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8340 – 8350	100	**CLAYSTONE:** medium light gray (N6), medium gray (N5), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous.	
8350 – 8360	100	**CLAYSTONE:** medium light gray (N6), medium gray (N5), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous.	
8360 – 8370	100	**CLAYSTONE:** medium light gray (N6), medium gray (N5), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous.	
8370 – 8380	90 10	**CLAYSTONE:** medium light gray (N6), medium gray (N5), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, friable,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8380 – 8390	100	**CLAYSTONE:** medium light gray (N6), medium gray (N5), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous.	
8390 – 8400	100	**CLAYSTONE:** medium light gray (N6), medium gray (N5), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous.	
8400 – 8410	100 Tr	**CLAYSTONE:** medium light gray (N6), medium gray (N5), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8410 – 8420	90 10	**CLAYSTONE:** medium light gray (N6), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8420 – 8430	90 10	**CLAYSTONE:** medium light gray (N6), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8430 – 8440	100	**CLAYSTONE:** medium light gray (N6), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8440 – 8450	100 Tr	**CLAYSTONE:** medium light gray (N6), dark gray (N3), grayish black (N2), earthy, amorphous, soft, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8450 – 8460	100	**CLAYSTONE:** medium light gray (N6), dark gray (N3), grayish black (N2), earthy, amorphous, blocky to subblocky, soft to moderately firm, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8460 – 8470	100	**CLAYSTONE:** medium light gray, grayish black (N2), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		amorphous, blocky to subblocky, soft to moderately firm, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **Accessories:** Calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8470 – 8480	100	**CLAYSTONE:** medium light gray (N6), dark gray (N3), grayish black (N2), earthy, amorphous, blocky to subblocky, soft to moderately firm, plastic, very soluble, occasionally silty, microcarbonaceous, non calcareous. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT CHEMICALS.**	
8480 – 8490	100	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), occasionally medium light gray (N6), earthy, amorphous, blocky to subblocky, soft to moderately firm, plastic, soluble, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT CHEMICALS.**	
8490 – 8500	100	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), occasionally medium light gray (N6), earthy, amorphous, blocky to subblocky, soft to moderately firm, locally plastic, locally soluble, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8500 – 8510	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), occasionally medium light gray (N6), earthy, amorphous, blocky to subblocky, soft to moderately firm, locally plastic, locally soluble, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8510 – 8520	100	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), occasionally medium light gray (N6), earthy, amorphous, blocky to subblocky, soft to moderately firm, locally plastic, locally soluble, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8520 – 8530	50 50	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), occasionally medium light gray (N6), earthy, amorphous, blocky to subblocky, moderately firm to moderately soft, locally soluble, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 60% fine, 40% medium quartz grain, hyaline,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		translucent, angular to subangular, well sorted.	
	Tr	**SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
		Accessories: calcite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.	
8530 – 8540	70	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), occasionally medium light gray (N6), earthy, amorphous, blocky to subblocky, moderately firm to moderately soft, locally soluble, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, angular to subangular, well sorted.	
		Accessories: calcite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.	
8540 – 8550	90	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), occasionally medium light gray (N6), earthy, amorphous, blocky to subblocky, moderately firm to moderately soft, locally soluble, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SAND:** white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, angular to subangular, well sorted.	
	Tr	**SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
		Accessories: calcite, pyrite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.	
8550 – 8560	100	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), occasionally medium light gray (N6), earthy, amorphous, blocky to subblocky, moderately firm to moderately soft, locally soluble, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	**SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
		Accessories: calcite.	
		NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.	
8560 – 8570	80	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), occasionally medium light gray (N6), earthy, amorphous, blocky to subblocky, moderately firm to moderately soft, locally soluble, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 Tr	**SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **SAND:** white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, angular to subangular, well sorted. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8570 – 8580	70 20 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), occasionally medium light gray (N6), earthy, amorphous, blocky to subblocky, moderately firm to moderately soft, locally soluble, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **SAND:** white (N9), 90% fine, 10% medium quartz grain, hyaline, translucent, angular to subangular, well sorted. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8580 – 8590	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), earthy, locally amorphous, blocky to subblocky, moderately firm to firm, locally soluble, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8590 – 8600	80 20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), earthy, locally amorphous, blocky to subblocky, moderately firm to firm, locally soluble, locally silty, micromicaceous, microcarbonaceous, non calcareous to very slightly calcareous. **SANDSTONE:** medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
8600 – 8610	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), earthy, locally amorphous, blocky to subblocky, locally subtabular, moderately firm to firm, locally soluble, locally silty, micromicaceous, microcarbonaceous, non calcareous to very slightly calcareous. **SANDSTONE:** medium light gray (N6), locally light gray (N7), very	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	
8610 – 8620	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), earthy, blocky to subblocky, locally subtabular to sublaminar, moderately firm to firm, locally soluble, locally silty, micromicaceous, microcarbonaceous, non calcareous to very slightly calcareous. **SANDSTONE:** medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, moderately friable, with dark minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	
8620 – 8630	80 20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), grayish black (N2), earthy, blocky to subblocky, locally subtabular to sublaminar, moderately firm to firm, locally soluble, locally silty, micromicaceous, microcarbonaceous, non calcareous to very slightly calcareous. **SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, angular to subangular, well sorted. **Accessories:** calcite.	
8630 – 8640	60 30 10	**CLAYSTONE:** grayish black (N2), dark gray (N3), occasionally medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, midromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** dark gray (N3), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone. **SANDSTONE:** dark gray (N3), fine quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8640 – 8650	70 20 10	**CLAYSTONE:** grayish black (N2), dark gray (N3), occasionally medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, midromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** dark gray (N3), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone. **SANDSTONE:** dark gray (N3), fine quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** dolomite.	
8650 – 8660	80	**CLAYSTONE:** grayish black (N2), dark gray (N3), occasionally medium dark gray (N4), locally brownish black (5YR 2/1), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, midromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** dark gray (N3), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	10	**SANDSTONE:** dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
		Accessories: calcite.	
8660 – 8670	80	**CLAYSTONE:** grayish black (N2), dark gray (N3), occasionally medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, midromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** dark gray (N3), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	Tr	**SANDSTONE:** dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8670 – 8680	60	**CLAYSTONE:** grayish black (N2), dark gray (N3), occasionally medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, midromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** dark gray (N3), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	10	**SANDSTONE:** dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), very fine quartz grain, hyaline, translucent, subrounded to rounded, well sorted.	
8680 – 8690	70	**CLAYSTONE:** grayish black (N2), dark gray (N3), occasionally medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** dark gray (N3), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	10	**SANDSTONE:** dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	Tr	**SAND:** white (N9), fine to medium quartz grain, hyaline, translucent, subrounded to rounded, well sorted.	
8690 – 8700	50	**CLAYSTONE:** grayish black (N2), dark gray (N3), occasionally medium dark gray (N4), locally brownish black (5YR 2/1), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** dark gray (N3), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	20	**SANDSTONE:** dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), fine to medium quartz grain, hyaline, translucent, subrounded to rounded, well sorted.	
8700 – 8710	60	**CLAYSTONE:** grayish black (N2), dark gray (N3), occasionally medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** dark gray (N3), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	20	**SANDSTONE:** dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8710 – 8720	70	**CLAYSTONE:** grayish black (N2), medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** dark gray (N3), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	10	**SANDSTONE:** dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8720 – 8730	70	**CLAYSTONE:** grayish black (N2), medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** dark gray (N3), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	10	**SANDSTONE:** dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8730 – 8740	60	**CLAYSTONE:** grayish black (N2), medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SILTSTONE:** dark gray (N3), earthy, blocky to subblocky,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	10	**SANDSTONE:** dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8740 – 8750	60	**CLAYSTONE:** grayish black (N2), medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	20	**SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8750 – 8760	70	**CLAYSTONE:** grayish black (N2), medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally laminar, occasionally splintery, moderately firm to soft, locally brittle, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	10	**SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8760 – 8770	80	**CLAYSTONE:** grayish black (N2), medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally laminar, occasionally splintery, moderately firm to soft, locally brittle, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	Tr	**SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8770 – 8780	60	**CLAYSTONE:** grayish black (N2), medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally laminar, occasionally splintery, moderately firm to soft, locally brittle, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	**SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8780 – 8790	60	**CLAYSTONE:** grayish black (N2), medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally laminar, occasionally splintery, moderately firm to soft, locally brittle, silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	10	**SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8790 – 8800	70	**CLAYSTONE:** grayish black (N2), medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally laminar, occasionally splintery, moderately firm to soft, locally brittle, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone.	
	10	**SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
8800 – 8810	60	**CLAYSTONE:** grayish black (N2), medium dark gray (N4), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally laminar, moderately firm to soft, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SAND:** white (N9), very fine quartz grain, hyaline, translucent, subrounded to rounded, well sorted.	
	10	**SANDSTONE:** medium dark gray (N4), dark gray (N3), fine quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite.	
8810 – 8820	70	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SAND:** white (N9), very fine quartz grain, hyaline, translucent,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		subrounded to rounded, well sorted.	
	10	**SANDSTONE:** medium dark gray (N4), dark gray (N3), fine quartz grain, rounded to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite.	
8820 – 8830	80	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SANDSTONE:** medium gray (N5), locally medium light gray (N6), fine quartz grain, subangulat to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite.	
8830 – 8840	80	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SANDSTONE:** medium gray (N5), locally medium light gray (N6), fine quartz grain, subangulat to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show.	
	10	**SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite.	
8840 – 8850	90	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to soft, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous.	
	Tr	**SANDSTONE:** medium gray (N5), locally medium light gray (N6), fine quartz grain, subangulat to subrounded, well sorted, abundant argillaceous matrix, friable, with dark and greenish minerals inclusions, microcarbonaceous in part, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
8850 – 8860	90 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), grayish black (N2), locally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to soft, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm to soft, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite.	
8860 – 8870	70 20 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **SAND:** white (N9), very fine quartz grain, hyaline, translucent, subrounded to rounded, well sorted. **Accessories:** calcite, pyrite.	
8870 – 8880	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite.	
8880 – 8890	80 10 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **SAND:** white (N9), very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, pyrite.	
8890 – 8900	90 10 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **SAND:** white (N9), very fine quartz grain, hyaline, translucent,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		subangular to subrounded, well sorted. **Accessories:** calcite.	
8900 – 8910	70 20 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **SAND:** white (N9), very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, pyrite.	
8910 – 8920	90 10 Tr	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **SAND:** white (N9), very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, pyrite.	
8920 – 8930	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite, pyrite.	
8930 – 8940	100	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite.	
8940 – 8950	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SILTSTONE:** medium dark gray (N4), earthy, blocky to subblocky, moderate firm, micromicaceous, microcarbonaceous in part, grading to very fine sandstone, slightly calcareous. **Accessories:** calcite.	
8950 – 8960	90	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SANDSTONE:** medium dark gray (N4), very fine quartz grain, subrounded to rounded, well sorted, argillaceous matrix, tight to friable, with dark minerals inclusions, micropyritic, poor visual porosity, No Oil Show. **Accessories:** pyrite.	
8960 – 8970	70	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SANDSTONE:** medium dark gray (N4), very fine, occasionally medium quartz grain, subrounded to rounded, well sorted, argillaceous matrix, tight to friable, with dark minerals inclusions, micropyritic, poor visual porosity, No Oil Show. **Accessories:** pyrite, calcite.	
8970 – 8980	80	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium dark gray (N4), very fine, locally medium quartz grain, subrounded to rounded, well sorted, argillaceous matrix, tight to friable, with dark minerals inclusions, micropyritic, poor visual porosity, No Oil Show. **Accessories:** pyrite, calcite.	
8980 – 8990	90	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SANDSTONE:** medium dark gray (N4), very fine, locally medium quartz grain, subrounded to rounded, well sorted, argillaceous matrix, calcareous cement, tight to friable, with dark minerals inclusions, micropyritic, poor visual porosity, No Oil Show. **Accessories:** pyrite.	
8990 – 9000	80	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium dark gray (N4), very fine, locally medium quartz grain, subrounded to rounded, well sorted, argillaceous matrix, calcareous cement, tight to friable, with dark minerals inclusions, micropyritic, poor visual porosity, No Oil Show. **Accessories:** pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
9000 – 9010	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine, locally medium quartz grain, subrounded to rounded, well sorted, argillaceous matrix, calcareous cement, tight to friable, with dark minerals inclusions, micropyritic, poor visual porosity, No Oil Show. **Accessories:** pyrite.	
9010 – 9020	80 20	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine, locally medium quartz grain, subrounded to rounded, well sorted, argillaceous matrix, calcareous cement, tight to friable, with dark minerals inclusions, micropyritic, poor visual porosity, No Oil Show. **Accessories:** pyrite.	
9020 – 9030	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine, locally medium quartz grain, subrounded to rounded, well sorted, argillaceous matrix, calcareous cement, friable, with dark minerals inclusions, micropyritic, poor visual porosity, No Oil Show. **Accessories:** pyrite.	
9030 – 9040	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine, locally medium quartz grain, subrounded to rounded, well sorted, argillaceous matrix, calcareous cement, friable, with dark minerals inclusions, micropyritic, poor visual porosity, No Oil Show. **Accessories:** pyrite.	
9040 – 9050	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine, locally medium quartz grain, subrounded to rounded, well sorted, argillaceous matrix, calcareous cement, friable, with dark minerals inclusions, micropyritic, poor visual porosity, No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: pyrite.	
9050 – 9060	80 20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusions, micropyritic, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	
9060 – 9070	90 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusions, micropyritic, poor visual porosity. No Oil Show. **Accessories:** pyrite.	
9070 – 9080	90 10 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusions, micropyritic, poor visual porosity. No Oil Show. **SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** pyrite.	
9080 – 9090	80 10 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** pyrite, coal.	

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INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
9090 – 9100	70 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite, microfossils.	
9100 – 9110	70 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar to subplaty, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** pyrite.	
9110 – 9120	80 10 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** pyrite, calcite.	
9120 – 9130	80 10 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** pyrite, calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
9130 – 9140	80 20	**CLAYSTONE**: dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable, minor tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite.	
9140 – 9150	90 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable, minor tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite.	
9150 – 9160	80 10 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable, minor tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9160 – 9170	90 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable, minor tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite.	
9170 – 9180	70 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable, minor tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		angular broken grains, well sorted. **Accessories:** pyrite.	
9180 – 9190	90 10 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable, minor tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9190 – 9200	80 10 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable, minor tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9200 – 9210	80 10 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable, minor tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9210 – 9220	70 30 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable, minor tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: pyrite.	
9220 – 9230	60 30 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable, minor tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9230 – 9240	70 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9240 – 9250	60 30 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9250 – 9260	70 20 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
9260 – 9270	60 30 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9270 – 9280	60 30 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9280 – 9290	50 30 20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9290 – 9300	60 30 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9300 – 9310	60	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted.	
	10	**SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite.	
9310 – 9320	70	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted. **Accessories:** pyrite.	
9320 – 9330	60	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SAND:** white (N9), translucent, hyaline, very fine to fine, occasionally coarse quartz grain, subrounded to subangular, angular broken grains, well sorted.	
	10	**SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite.	
9330 – 9340	80	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	**SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), hyaline, very fine to fine, occasionally medium quartz grain, subrounded to subangular, well sorted. **Accessories:** pyrite, calcite.	
9340 – 9350	60	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SAND:** white (N9), hyaline, very fine to fine, occasionally medium quartz grain, subrounded to subangular, well sorted.	
	10	**SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show.	
		Accessories: pyrite, calcite.	
9350 – 9360	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SAND:** white (N9), hyaline, very fine to fine, locally medium quartz grain, subrounded to subangular, well sorted.	
	20	**SANDSTONE:** medium gray (N5), locally medium dark gray (N4), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to tight, micropyritic, with dark minerals inclusions, poor visual porosity. No Oil Show.	
		Accessories: pyrite, calcite.	
9360 – 9370	40	**SAND:** white (N9), 70% fine, 30% medium quartz grain, hyaline, subangular to subrounded, well sorted.	
	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity.	TR
		Fluorescence: NVOS, traces, pin point, dull, pale yellowish natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring.	
		Accessories: pyrite, calcite.	
9370 – 9380	40	**SAND:** white (N9), 60% fine, 40% medium, traces coarse quartz grain, hyaline, subangular to subrounded, well sorted.	
	30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SANDSTONE:** medium light gray (N6), medium gray (N5), locally light gray (N7), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity.	7
		Fluorescence: NVOS, 7%, pin point, dull, pale yellowish natural fluorescence, crush, faint, pale, streaming, yellowish white cut	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		fluorescence, no visual residual ring. **Accessories:** pyrite, calcite.	
9380 – 9390	50 30 20	**SAND:** white (N9), 50% fine, 40% medium, 10% coarse quartz grain, hyaline, subangular to subrounded, well sorted. **SANDSTONE:** light gray (N7), medium light gray (N6), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity. **Fluorescence:** NVOS, 10%, pin point, dull, pale yellowish natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** pyrite, calcite.	10
9390 – 9400	60 20 20	**SAND:** white (N9), 40% fine, 40% medium, 20% coarse, traces very coarse quartz grain, hyaline, subangular to subrounded, well sorted. **SANDSTONE:** light gray (N7), medium light gray (N6), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity. **Fluorescence:** NVOS, 5%, pin point, dull, pale yellowish natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** pyrite, calcite.	5
9400 – 9410	40 30 30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), 50% fine, 40% medium, 10% coarse, traces very coarse quartz grain, hyaline, subangular to subrounded, well sorted. **SANDSTONE:** light gray (N7), medium light gray (N6), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity. **Fluorescence:** NVOS, 5%, pin point, dull, pale yellowish natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring. **Accessories:** pyrite, calcite.	5
9410 – 9420	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	**SAND:** white (N9), 60% fine, 40% medium, traces coarse quartz grain, hyaline, subangular to subrounded, well sorted.	
	20	**SANDSTONE:** light gray (N7), medium light gray (N6), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity. **Fluorescence:** NVOS, traces, pin point, dull, pale yellowish natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring. **Accessories:** pyrite, calcite.	
9420 – 9430	60	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	**SAND:** white (N9), 70% fine, 30% medium, traces coarse quartz grain, hyaline, subangular to subrounded, well sorted.	
	20	**SANDSTONE:** light gray (N7), medium light gray (N6), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity. **Fluorescence:** NVOS, traces, pin point, dull, pale yellowish natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring. **Accessories:** pyrite, calcite.	
9430 – 9440	70	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, occasionally sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	**SANDSTONE:** light gray (N7), medium light gray (N6), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), 90% fine, 10% medium quartz grain, hyaline, subangular to subrounded, well sorted. **Accessories:** pyrite, calcite.	
9440 – 9450	50	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, locally silty, micromicaceous, non calcareous.	
	40	**SANDSTONE:** light gray (N7), medium light gray (N6), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity. No Oil Show.	
	10	**SAND:** white (N9), 100% very fine, occasionally medium quartz grain, hyaline, subangular to subrounded, well sorted.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: pyrite, calcite.	
9450 – 9460	60 30 10	**SANDSTONE:** light gray (N7), medium light gray (N6), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, locally silty, micromicaceous, non calcareous. **SAND:** white (N9), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted. **Accessories:** calcite, dolomite.	
9460 – 9470	60 30 10	**SANDSTONE:** light gray (N7), medium light gray (N6), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, locally silty, micromicaceous, non calcareous. **SAND:** white (N9), very fine to fine, occasionally medium quartz grain, hyaline, subangular to subrounded, well sorted. **Accessories:** calcite, dolomite, pyrite.	
9470 – 9480	50 40 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, locally silty, micromicaceous, non calcareous. **SANDSTONE:** light gray (N7), medium light gray (N6), fine, locally medium quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted. **Accessories:** calcite.	
9480 – 9490	50 30 20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, locally silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine, occasionally medium quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted. **Accessories:** calcite.	
9490 – 9500	50 40	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, locally silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	occasionally medium quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted.	
9500 – 9510	70 30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, locally silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine, occasionally medium quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity. No Oil Show.	
9510 – 9520	60 40	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, locally silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine, occasionally medium quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show.	
9520 – 9530	70 30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, locally silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine, occasionally medium quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, locally with dark minerals inclusions, poor visual porosity. No Oil Show.	
9530 – 9540	80 20	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, locally silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine, occasionally medium quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show.	
9540 – 9550	70 30	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, dolomite.	
9550 – 9560	90	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	firm, occasionally brittle, silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
9560 – 9570	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, occasionally brittle, silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
9570 – 9580	90 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, occasionally brittle, silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
9580 – 9590	90 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, occasionally brittle, silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
9590 – 9600	90 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, occasionally brittle, silty, micropyritic, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
9600 – 9610	90 10	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, occasionally brittle, silty, micropyritic, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
9610 – 9620	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, laminar, moderately firm to firm, occasionally brittle, silty, micropyritic, micromicaceous, non calcareous.	
9620 – 9630	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, occasionally brittle, silty, micropyritic, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show.	
9630 – 9640	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, occasionally brittle, silty, micropyritic, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz grain, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, dirty, locally with dark minerals inclusions, poor visual porosity. No Oil Show.	
9640 – 9650	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, moderately firm to firm, occasionally brittle, silty, micropyritic, micromicaceous, non calcareous.	
9650 – 9660	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
9660 – 9670	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, locally with dark	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
9670 – 9680	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), light gray (N7), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	
9680 – 9690	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite.	
9690 – 9700	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite.	
9700 – 9710	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), black (N1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite.	
9710 – 9720	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), black (N1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite.	
9720 – 9730	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), black (N1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite.	
9730 – 9740	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish black (5YR 2/1), black (N1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite, coal.	
9740 – 9750	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		grayish black (N2), occasionally brownish black (5YR 2/1), black (N1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite.	
9750 – 9760	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite.	
9760 – 9770	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite.	
9770 – 9780	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite.	
9780 – 9790	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite.	
9790 – 9800	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar to subplaty, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite.	
9800 – 9810	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite.	
9810 – 9820	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite.	
9820 – 9830	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		(N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite.	
9830 – 9840	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, coal.	
9840 – 9850	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite.	
9850 – 9860	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, coal.	
9860 – 9870	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite.	
9870 – 9880	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, locally silty, micropyritic in part, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite.	
9880 – 9890	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, silty in part, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite, pyrite.	
9890 – 9900	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite.	
9900 – 9910	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite.	
9910 – 9920	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite. **NOTE: sample contaminated with chemicals.**	
9920 – 9930	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusions, poor visual porosity. No Oil Show.	
9930 – 9940	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), , blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
9940 – 9950	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite.	
9950 – 9960	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium light gray (N6), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
9960 – 9970	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite.	
9970 – 9980	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
		Accessories: calcite.	
9980 – 9990	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
		Accessories: calcite.	
9990 – 10000	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10000 – 10010	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), brownish black (5YR 2/1), occasionally black (N1), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10010 – 10020	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10020 – 10030	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
		Accessories: calcite.	
10030 – 10040	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10040 – 10050	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10050 – 10060	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10060 – 10070	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10070 – 10080	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium dark gray (N4), very fine quartz grain,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10080 – 10090	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
10090 – 10100	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10100 – 10110	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10110 – 10120	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10120 – 10130	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
10130 – 10140	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10140 – 10150	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10150 – 10160	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, locally soft, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show.	
10160 – 10170	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, subfissile in part, moderately firm to firm, occasionally brittle, silty, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
10170 – 10180	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, silty, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
10180 – 10190	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), earthy, blocky to subblocky, locally sublaminar,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		moderately firm to firm, occasionally brittle, silty, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium gray (N5), locally medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
10190 – 10200	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, silty, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium gray (N5), locally medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
10200 – 10210	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, silty, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium gray (N5), locally medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	
10210 – 10220	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous.	
	Tr	**SANDSTONE:** medium gray (N5), locally medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	
10220 – 10230	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite, pyrite.	
10230 – 10240	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite, pyrite.	
10240 – 10250	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, silty, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite.	
10250 – 10260	100 Tr	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, silty in part, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium gray (N5), locally medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, tight, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
10260 – 10270	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, silty in part, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite.	
10270 – 10280	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, silty in part, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite.	
10280 – 10290	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, silty in part, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite.	
10290 – 10300	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, silty in part, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite.	
10300 – 10310	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, occasionally brittle, locally silty, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10310 – 10320	100	**CLAYSTONE:** dark gray (N3), medium dark gray (N4), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, locally silty, slightly soluble in part, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10320 – 10330	100	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, locally silty, slightly soluble in part, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
UPPER BASAL SALINA TOP. AT 10332.0 ft. MD (RT); 7683.92 ft. TVD (RT)			
10330 – 10340	90 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, locally silty, slightly soluble in part, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, slickenside. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10340 – 10350	60 30 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, locally silty, slightly soluble in part, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous. **SAND:** white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with dark minerals inclusions, poor visual porosity. **Fluorescence:** NVOS, traces, pin point, dull, pale yellowish natural fluorescence, slow, weak, pale, even, yellowish white cut fluorescence, no visual residual ring. **Accessories:** calcite, slickenside, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	TR

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INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
10350 – 10360	70 20 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, locally silty, slightly soluble in part, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **NOTE: 90% SAMPLE CONTAMINATED WITH ABUNDANT CHEMICALS (WALL NUT SHELL).**	
10360 – 10370	70 20 10	**CLAYSTONE:** medium dark gray (N4), dark gray (N3), locally grayish black (N2), occasionally brownish gray (5YR 4/1), earthy, blocky to subblocky, locally sublaminar, moderately firm to firm, locally soft, occasionally brittle, locally silty, slightly soluble in part, occasionally with thin calcite veins inclusion, micromicaceous, microcarbonaceous in part, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with dark minerals inclusions, poor to fair visual porosity. No Oil Show. **SAND:** white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **NOTE: 90% SAMPLE CONTAMINATED WITH ABUNDANT CHEMICALS (WALL NUT SHELL).**	
10370 – 10380	80 20	**CLAYSTONE:** dark gray (N3), grayish black (N2), scarse olive black (5Y 2/1), earthy, blocky to subblocky, occasionally tabular, firm, silty, with calcareous inclusion, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with dark minerals inclusions, poor to fair visual porosity. No Oil Show.	
10380 – 10390	90 10	**CLAYSTONE:** dark gray (N3), grayish black (N2), scarse olive black (5Y 2/1), earthy, blocky to subblocky, occasionally tabular, firm, silty, with calcareous inclusion, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with dark minerals inclusions, poor to fair visual porosity. No Oil Show.	
10390 – 10400	100 Tr	**CLAYSTONE:** dark gray (N3), grayish black (N2), scarse olive black (5Y 2/1), earthy, blocky to subblocky, occasionally tabular, firm, silty, with calcareous inclusion, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with dark minerals inclusions, poor to fair visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite.	
10400 – 10410	90 10	**CLAYSTONE:** dark gray (N3), grayish black (N2), scarse olive black (5Y 2/1), earthy, blocky to subblocky, occasionally tabular, firm, silty, with calcareous inclusion, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with dark minerals inclusions, poor to fair visual porosity. No Oil Show.	
10410 – 10420	80 10 10	**CLAYSTONE:** dark gray (N3), grayish black (N2), scarse olive black (5Y 2/1), earthy, blocky to subblocky, occasionally tabular, firm, silty, with calcareous inclusion, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with dark and green minerals inclusions, poor to fair visual porosity. No Oil Show. **SAND:** white (N9), fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
10420 – 10430	90 10	**CLAYSTONE:** dark gray (N3), grayish black (N2), occasionally medium dark gray (N4), earthy, blocky to subblocky, occasionally tabular, firm, locally silty, occasionally with calcareous inclusion, micromicaceous, occasionally microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with glauconite in part and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT CHEMICALS.**	
10430 – 10440	100 Tr	**CLAYSTONE:** dark gray (N3), grayish black (N2), occasionally medium dark gray (N4), earthy, blocky to subblocky, occasionally tabular, firm, locally silty, occasionally with calcareous inclusion, micromicaceous, occasionally microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with glauconite in part and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT CHEMICALS.**	
10440 – 10450	100 Tr	**CLAYSTONE:** dark gray (N3), grayish black (N2), occasionally medium dark gray (N4), earthy, blocky to subblocky, occasionally tabular, firm to moderately firm, locally silty, micromicaceous, occasionally microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with glauconite in part and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT**	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		CHEMICALS.	
10450 – 10460	100	**CLAYSTONE:** dark gray (N3), grayish black (N2), occasionally medium dark gray (N4), earthy, blocky to subblocky, occasionally tabular, firm to moderately firm, locally silty, micromicaceous, occasionally microcarbonaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10460 – 10470	100 Tr	**CLAYSTONE:** dark gray (N3), grayish black (N2), occasionally medium dark gray (N4), earthy, blocky to subblocky, occasionally tabular, firm to moderately firm, locally silty, micromicaceous, occasionally microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with glauconite in part and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10470 – 10480	100 Tr	**CLAYSTONE:** dark gray (N3), grayish black (N2), occasionally medium dark gray (N4), earthy, blocky to subblocky, occasionally tabular, firm to moderately firm, locally silty, micromicaceous, occasionally microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarse calcareous cement, tight, with glauconite in part and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10480 – 10490	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, silty, micromicaceous, non calcareous. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10490 – 10500	90 10	**CLAYSTONE:** grayish black (N2), dark gray (N2), earthy, blocky to subblocky, occasionally subtabular, silty, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, angular to subangular, moderately sorted, argillaceous matrix, calcareous cement, tight, with green (glauconite?) and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite.	
10500 – 10510	90 10	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, silty, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, angular to subangular, moderately sorted, argillaceous matrix, calcareous cement, tight, with green (glauconite?) and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite, calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
10510 – 10520	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, silty, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, angular to subangular, moderately sorted, argillaceous matrix, calcareous cement, tight, with green (glauconite?) and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite, calcite.	
10520 – 10530	90 10	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, silty, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, angular to subangular, moderately sorted, argillaceous matrix, calcareous cement, tight, with green (glauconite?) and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite, calcite.	
10530 – 10540	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, silty, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, angular to subangular, moderately sorted, argillaceous matrix, calcareous cement, tight, with green (glauconite?) and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10540 – 10550	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, silty, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), dark gray (N3), fine to medium quartz grain, angular to subangular, moderately sorted, argillaceous matrix, calcareous cement, tight, with green (glauconite?) and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10550 – 10560	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micromicaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), dark gray (N3), fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, tight, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10560 – 10570	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	occasionally microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), dark gray (N3), fine quartz grain, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, tight, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10570 – 10580	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micromicaceous, occasionally microcarbonaceous, non calcareous. **SANDSTONE:** medium dark gray (N4), dark gray (N3), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, tight, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10580 – 10590	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micromicaceous, occasionally microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium light gray (N6), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, tight, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	
10590 – 10600	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micromicaceous, occasionally microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium light gray (N6), fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, tight, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10600 – 10610	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micromicaceous, occasionally microcarbonaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10610 – 10620	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micromicaceous, occasionally microcarbonaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10620 – 10630	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micromicaceous, occasionally microcarbonaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10630 – 10640	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		subblocky, locally subtabular, firm, slightly silty in part, micromicaceous, occasionally microcarbonaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10640 – 10650	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, slightly silty in part, micromicaceous, occasionally microcarbonaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICALS.**	
10650 - 10660	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, slightly silty in part, micromicaceous, occasionally microcarbonaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH 90 % CHEMICAL.**	
10660 – 10670	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, firm, silty, micromicaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH 90 % CHEMICAL.**	
10670 – 10680	90 10	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty, micromicaceous, micropyritic, non calcareous. **SANDSTONE:** dark gray (N3), very fine quartz grain, subrounded to rounded, well sorted, scarse calcareous cement, tight, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite.	
10680 – 10690	70 20 10	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty, micromicaceous, micropyritic, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), medium dark gray (N4), dark gray (N3), very fine quartz grain, subrounded to rounded, well sorted, scarse calcareous cement, tight, friable, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), very fine quartz grain, subrounded to rounded, well sorted. **Accessories:** calcite, pyrite.	
10690 – 10700	70 20 10	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty, grading to siltstone, micromicaceous, micropyritic, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), medium dark gray (N4), dark gray (N3), very fine quartz grain, subrounded to rounded, well sorted, scarse calcareous cement, tight, friable, with dark minerals inclusions, poor visual porosity. No Oil Show. **SAND:** white (N9), very fine quartz grain, subrounded to rounded, well sorted. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10700 – 10710	80	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty, grading to siltstone, micromicaceous, micropyritic, microcarbonaceous, non calcareous.	

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INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	**SANDSTONE:** medium gray (N5), medium dark gray (N4), dark gray (N3), very fine quartz grain, subrounded to rounded, well sorted, scarse calcareous cement, tight, friable, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10710 – 10720	90 10	**CLAYSTONE:** grayish black (N2), dark gray (N2), earthy, blocky to subblocky, locally subtabular, firm, silty, grading to siltstone, micromicaceous, micropyritic, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), medium dark gray (N4), dark gray (N3), very fine quartz grain, subrounded to rounded, well sorted, scarse calcareous cement, tight, friable, with dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10720 – 10730	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty, grading to siltstone, micromicaceous, micropyritic, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), medium dark gray (N4), dark gray (N3), very fine quartz grain, subrounded to rounded, well sorted, scarse calcareous cement, tight, friable, with green (glauconite?) and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite, calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10730 – 10740	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty, grading to siltstone, micromicaceous, micropyritic, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), medium dark gray (N4), dark gray (N3), very fine quartz grain, subrounded to rounded, well sorted, scarse calcareous cement, tight, friable, with green (glauconite?) and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** pyrite, calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10740 – 10750	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty, grading to siltstone, micromicaceous, micropyritic, microcarbonaceous, non calcareous. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10750 – 10760	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, silty, grading to siltstone, micromicaceous, micropyritic, microcarbonaceous, non calcareous. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10760 – 10770	100 Tr	**CLAYSTONE:** dark gray (N3), grayish black (N2), locally olive black (5Y 2/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), very fine quartz grain, hyaline, subrounded to rounded, well sorted.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10770 – 10780	100	**CLAYSTONE:** dark gray (N3), grayish black (N2), locally olive black (5Y 2/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10780 – 10790	100 Tr	**CLAYSTONE:** dark gray (N3), grayish black (N2), locally olive black (5Y 2/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), very fine quartz grain, hyaline, subrounded to rounded, well sorted. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10790 – 10800	100 Tr	**CLAYSTONE:** dark gray (N3), grayish black (N2), locally olive black (5Y 2/1), occasionally brownish black (5YR 2/1), medium dark gray (N4), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), very fine quartz grain, hyaline, subrounded to rounded, well sorted. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10800 – 10810	100	**CLAYSTONE:** dark gray (N3), grayish black (N2), locally olive black (5Y 2/1), occasionally brownish black (5YR 2/1), medium dark gray (N4), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10810 – 10820	100	**CLAYSTONE:** dark gray (N3), grayish black (N2), locally olive black (5Y 2/1), occasionally brownish black (5YR 2/1), medium dark gray (N4), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10820 – 10830	90 10	**CLAYSTONE:** dark gray (N3), grayish black (N2), locally olive black (5Y 2/1), occasionally brownish black (5YR 2/1), medium dark gray (N4), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT CHEMICAL.**	
10830 – 10840	60 30 10	**CLAYSTONE:** dark gray (N3), grayish black (N2), locally olive black (5Y 2/1), occasionally brownish black (5YR 2/1), medium dark gray (N4), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous. **SANDSTONE:** medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, with dark and greenish minerals inclusions, poor visual porosity. **Fluorescence:** NVOS, 10%, pin point, dull, pale yellow natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring. **SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT CHEMICAL.**	10
10840 – 10850	40 40 20	**CLAYSTONE:** dark gray (N3), grayish black (N2), locally olive black (5Y 2/1), occasionally brownish black (5YR 2/1), medium dark gray (N4), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous. **SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, with dark and greenish minerals inclusions, poor visual porosity. **Fluorescence:** NVOS, 10%, pin point, dull, pale yellow natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT CHEMICAL.**	10
10850 – 10860	40 30 30	**SAND:** white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **SANDSTONE:** medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, with dark and greenish minerals inclusions, poor visual porosity. **Fluorescence:** NVOS, 15%, pin point, dull, pale yellow natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring. **CLAYSTONE:** dark gray (N3), grayish black (N2), locally olive black	15

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		(5Y 2/1), occasionally brownish black (5YR 2/1), medium dark gray (N4), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT CHEMICAL.**	
10860 – 10870	50 30 20	**SAND:** white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **CLAYSTONE:** dark gray (N3), grayish black (N2), locally olive black (5Y 2/1), occasionally brownish black (5YR 2/1), medium dark gray (N4), earthy, blocky to subblocky, locally subtabular, firm, silty in part, micropyritic, micromicaceous, microcarbonaceous, non calcareous. **Fluorescence:** NVOS, 10%, pin point, dull, pale yellow natural fluorescence, crush, faint, pale, streaming, yellowish white cut fluorescence, no visual residual ring. **SANDSTONE:** medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, with dark and greenish minerals inclusions, poor visual porosity. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT CHEMICAL.**	10
10870 – 10880	70 20 10	**CLAYSTONE:** grayish black (N2), earthy, subtabular to sublaminar, occasionally subfissile, silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, subrounded to rounded, argillaceous matrix, friable, with green (glauconite?) and dark minerals inclusions, poor to fair visual porosity. No Oil Show. **SAND:** white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10880 – 10890	80 20	**CLAYSTONE:** grayish black (N2), earthy, subtabular to sublaminar, occasionally subfissile, silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, subrounded to rounded, argillaceous matrix, friable, with green (glauconite?) and dark minerals inclusions, poor to fair visual porosity. **Fluorescence:** NVOS, traces, pin point, dull, pale yellow natural fluorescence, slow, faint, faint, blooming, yellowish white cut fluorescence, no visual residual ring. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT CHEMICAL.**	TR
10890 – 10900	90 10	**CLAYSTONE:** grayish black (N2), earthy, subtabular to sublaminar, occasionally subfissile, silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, subrounded to rounded, argillaceous matrix, friable, with green	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		(glauconite?) and dark minerals inclusions, poor to fair visual porosity. No Oil Show. **NOTE: 90% SAMPLE CONTAMINATED WITH CHEMICAL.**	
10900 – 10910	100 Tr	**CLAYSTONE:** grayish black (N2), earthy, subtabular to sublaminar, occasionally subfissile, silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, subrounded to rounded, argillaceous matrix, friable, with green (glauconite?) and dark minerals inclusions, poor to fair visual porosity. No Oil Show. **NOTE: SAMPLE CONTAMINATED WITH ABUNDANT CHEMICAL.**	
10910 – 10920	100 Tr	**CLAYSTONE:** grayish black (N2), earthy, subtabular to sublaminar, occasionally subfissile, silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), very fine to fine quartz grain, subrounded to rounded, argillaceous matrix, friable, with green (glauconite?) and dark minerals inclusions, poor to fair visual porosity. No Oil Show. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10920 – 10930	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, argillaceous matrix, moderately friable to friable, with greenish and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10930 – 10940	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, non calcareous. **SANDSTONE:** medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, argillaceous matrix, moderately friable to friable, with greenish and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10940 – 10950	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, argillaceous matrix, moderately friable to friable, with greenish and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10950 – 10960	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), locally medium gray (N5),	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		very fine to fine quartz grain, hyaline, subangular to subrounded, argillaceous matrix, moderately friable to friable, with greenish and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10960 – 10970	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, argillaceous matrix, moderately friable to friable, with greenish and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite, pyrite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10970 – 10980	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, argillaceous matrix, moderately friable to friable, with greenish and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
BALCONES FM. TOP. AT 10980.0 ft. MD (RT); 8228.70 ft. TVD (RT)			
10980 – 10990	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
10990 – 11000	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, argillaceous matrix, scarse calcareous cement, moderately friable to friable, with greenish and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
11000 – 11010	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, argillaceous matrix, scarse calcareous cement, moderately friable to friable, with greenish and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.	
11010 – 11020	100 Tr	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, argillaceous matrix, scarse calcareous cement, moderately friable to friable, with greenish and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite. **NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.**	
11020 – 11030	100	**CLAYSTONE:** grayish black (N2), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **Accessories:** calcite.	
11030 – 11040	100	**CLAYSTONE:** dark gray (N3), grayish black (N2), medium dark gray (N4), occasionally black (N1), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **Accessories:** calcite.	
11040 – 11050	100	**CLAYSTONE:** dark gray (N3), grayish black (N2), medium dark gray (N4), occasionally black (N1), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous.	
11050 – 11060	100 Tr	**CLAYSTONE:** dark gray (N3), grayish black (N2), medium dark gray (N4), occasionally black (N1), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **SANDSTONE:** medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, argillaceous matrix, scarse calcareous cement, moderately friable to friable, with greenish and dark minerals inclusions, poor visual porosity. No Oil Show. **Accessories:** calcite.	
11060 – 11070	100	**CLAYSTONE:** dark gray (N3), grayish black (N2), medium dark gray (N4), occasionally black (N1), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **Accessories:** calcite.	
11070 – 11080	100	**CLAYSTONE:** dark gray (N3), grayish black (N2), medium dark gray (N4), occasionally black (N1), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **Accessories:** calcite.	
11080 – 11090	100	**CLAYSTONE:** dark gray (N3), grayish black (N2), medium dark gray (N4), occasionally black (N1), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **Accessories:** calcite, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
11090 – 11095	100	**CLAYSTONE:** dark gray (N3), grayish black (N2), medium dark gray (N4), occasionally black (N1), earthy, blocky to subblocky, locally subtabular to sublaminar, firm, locally silty, micromicaceous, slightly microcarbonaceous, non calcareous. **Accessories:** calcite.	
FINAL TOTAL DEPTH 11095.0 ft. MD(RT); 8332.8 ft. TVD(RT)			

T.G.T - LAB
REGISTROS GEOLÓGICOS

SAVIA PERÚ

WELL: LO6-27D

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
HELICO Mbr. (TALARA Fm.)							
754	84.7	1.25	125	0	0	0	0
755	86.8	5.00	500	0	0	0	0
756	82.6	6.05	605	0	0	0	0
757	103	9.22	922	0	0	0	0
758	102.7	9.34	934	0	0	0	0
759	125.2	9.68	968	0	0	0	0
760	103.1	5.60	560	0	0	0	0
761	79.4	5.35	535	0	0	0	0
762	105.3	5.35	535	0	0	0	0
763	73.8	5.84	584	0	0	0	0
764	121	7.27	727	0	0	0	0
765	115.5	7.27	727	0	0	0	0
766	102.7	9.93	993	0	0	0	0
767	74.9	9.93	993	0	0	0	0
768	79.8	11.98	1198	0	0	0	0
769	82.4	12.11	1211	0	0	0	0
770	79.4	11.80	1180	0	0	0	0
771	58.9	11.80	1180	0	0	0	0
772	61.9	11.36	1136	0	0	0	0
773	55.5	10.10	1010	0	0	0	0
774	75.8	10.10	1010	0	0	0	0
775	97.4	9.93	993	0	0	0	0
776	107.2	9.93	993	0	0	0	0
777	124.5	10.10	1010	0	0	0	0
778	100.4	10.10	1010	0	0	0	0
779	123.9	11.22	1122	0	0	0	0
780	113.6	11.22	1122	0	0	0	0
781	95.5	10.47	1047	0	0	0	0
782	98.2	10.59	1059	0	0	0	0
783	106.1	10.59	1059	0	0	0	0
784	92.5	10.27	1027	0	0	0	0
LOBITOS Mbr. (TALARA Fm.)							
785	50.9	10.41	1041	0	0	0	0
786	74.7	10.24	1024	0	0	0	0
787	51.4	9.09	909	0	0	0	0
788	71.4	7.77	777	0	0	0	0
789	48.5	7.72	772	0	0	0	0
790	50.4	7.02	702	0	0	0	0
791	57.5	7.75	775	0	0	0	0
792	26	4.66	462	2	0	0	0
793	32	4.88	482	3	0	0	0
794	35.7	5.94	588	3	0	0	0
795	17	7.27	717	5	0	0	0
796	43.9	9.88	964	12	0	0	0
797	33.1	10.25	1009	8	0	0	0
798	32.2	10.25	1009	8	0	0	0
799	28.4	8.86	868	6	2	0	0
800	38.2	8.36	820	5	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
801	36.3	8.20	808	3	2	0	0
802	35.4	7.44	735	3	1	0	0
803	32.3	7.82	768	4	2	0	0
804	27.4	7.81	767	4	2	0	0
805	35.2	7.48	734	4	2	0	0
806	29.4	7.68	759	3	1	0	0
807	29.3	7.65	748	4	3	0	0
808	32.2	7.96	782	4	2	0	0
809	27.1	7.73	759	4	2	0	0
810	29	7.18	702	5	2	0	0
811	31.7	7.33	719	4	2	0	0
812	24.8	8.28	811	4	3	0	0
813	30	8.42	828	4	2	0	0
814	34.7	10.30	1014	5	2	0	0
815	36.7	10.72	1053	5	3	0	0
816	31	10.62	1043	5	3	0	0
817	27.9	9.75	956	5	3	0	0
818	31.4	8.69	860	3	1	0	0
819	27.3	7.93	779	4	2	0	0
820	34	7.40	723	4	3	0	0
821	29.8	6.75	661	4	2	0	0
822	25.8	6.51	637	4	2	0	0
823	28.1	6.45	638	2	1	0	0
824	34.5	6.33	626	2	1	0	0
825	32.6	6.90	683	2	1	0	0
826	33.7	7.46	739	2	1	0	0
827	33.8	7.13	706	2	1	0	0
828	33	7.39	732	2	1	0	0
829	30.4	7.05	696	3	1	0	0
830	62.9	7.73	764	3	1	0	0
831	66.1	7.88	779	3	1	0	0
832	53.1	7.88	779	3	1	0	0
833	54	7.88	779	3	1	0	0
834	49.3	8.79	872	2	1	0	0
835	50.8	8.81	872	3	1	0	0
836	60	10.14	1005	3	1	0	0
837	53.4	10.15	1006	3	1	0	0
838	51	10.25	1016	3	1	0	0
839	52.5	10.43	1036	2	1	0	0
840	75	11.92	1188	2	0	0	0
841	62.9	6.38	634	2	0	0	0
842	62.3	6.38	634	2	0	0	0
843	60.5	13.32	1328	2	0	0	0
844	60.5	13.94	1390	2	0	0	0
845	60.5	14.56	1452	2	0	0	0
846	37.6	13.50	1344	3	0	0	0
847	57	13.50	1344	3	0	0	0
848	65.6	13.26	1320	3	0	0	0
849	72.4	12.52	1246	3	0	0	0
850	61.7	11.86	1180	3	0	0	0
851	49.6	11.83	1179	2	0	0	0
852	47.1	11.59	1155	2	0	0	0
853	47.1	11.27	1123	2	0	0	0
854	68.2	10.95	1091	2	0	0	0
855	47.1	10.63	1059	2	0	0	0
856	39	10.31	1027	2	0	0	0
857	32.8	9.99	995	2	0	0	0
858	43.4	9.75	971	2	0	0	0
859	44.8	10.14	1010	2	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
860	62	10.79	1075	2	0	0	0
861	58.9	10.79	1075	2	0	0	0
862	52.4	10.46	1042	2	0	0	0
863	63.2	9.78	974	2	0	0	0
864	65.9	9.76	974	1	0	0	0
865	68.6	9.76	974	1	0	0	0
866	71.3	9.76	974	1	0	0	0
867	44.6	9.65	963	1	0	0	0
868	44.6	9.65	963	1	0	0	0
869	53.4	8.95	893	1	0	0	0
870	45.1	8.42	840	1	0	0	0
871	49.4	8.00	798	1	0	0	0
872	44.4	8.05	803	1	0	0	0
873	38.1	7.76	776	0	0	0	0
874	64.4	7.28	728	0	0	0	0
875	65.5	6.75	675	0	0	0	0
876	53.4	6.66	666	0	0	0	0
877	58.1	7.10	710	0	0	0	0
878	57.1	8.10	810	0	0	0	0
879	55	8.26	826	0	0	0	0
880	48.6	7.89	789	0	0	0	0
881	41.7	7.55	755	0	0	0	0
882	52.5	7.74	774	0	0	0	0
883	44.7	7.20	720	0	0	0	0
884	61.5	6.90	690	0	0	0	0
885	57.9	6.38	638	0	0	0	0
886	55.2	6.76	676	0	0	0	0
887	57.3	4.30	430	0	0	0	0
888	14.2	3.07	307	0	0	0	0
889	16.9	3.18	318	0	0	0	0
890	15.4	3.23	323	0	0	0	0
891	20.1	3.33	333	0	0	0	0
892	22.4	3.35	335	0	0	0	0
893	22.2	3.28	328	0	0	0	0
894	20.4	3.20	320	0	0	0	0
895	18.9	3.23	323	0	0	0	0
896	25.4	3.33	333	0	0	0	0
897	19.3	3.31	331	0	0	0	0
898	13.5	3.44	344	0	0	0	0
899	26.3	3.52	352	0	0	0	0
900	26.2	3.89	389	0	0	0	0
901	22.1	3.77	377	0	0	0	0
902	17.2	3.38	338	0	0	0	0
903	20.6	3.44	344	0	0	0	0
904	23.9	3.73	373	0	0	0	0
905	20	3.86	386	0	0	0	0
906	22.7	4.05	405	0	0	0	0
907	23.6	4.13	413	0	0	0	0
908	23.6	4.01	401	0	0	0	0
909	11.9	4.10	410	0	0	0	0
910	25.6	4.26	426	0	0	0	0
911	25.6	4.48	448	0	0	0	0
912	28.8	4.21	421	0	0	0	0
913	27.5	4.33	433	0	0	0	0
914	25	4.85	485	0	0	0	0
915	27.2	5.12	512	0	0	0	0
916	28.9	4.90	490	0	0	0	0
917	22.6	5.04	504	0	0	0	0
918	4.9	6.05	605	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
919	44.4	6.57	657	0	0	0	0
920	29.6	6.07	607	0	0	0	0
921	37.8	5.97	597	0	0	0	0
922	47.9	6.08	608	0	0	0	0
923	46.2	6.55	655	0	0	0	0
924	49.9	6.96	696	0	0	0	0
925	46.5	6.98	698	0	0	0	0
926	55	7.43	743	0	0	0	0
927	61.7	7.43	743	0	0	0	0
928	70.7	7.43	743	0	0	0	0
929	55.5	7.54	754	0	0	0	0
930	64.5	7.78	778	0	0	0	0
931	44.7	7.46	746	0	0	0	0
932	39.5	7.35	735	0	0	0	0
933	42.6	7.73	773	0	0	0	0
934	81.7	8.60	860	0	0	0	0
935	87.1	8.62	862	0	0	0	0
936	115	8.70	870	0	0	0	0
937	109.5	8.64	864	0	0	0	0
938	86.8	8.40	840	0	0	0	0
939	76	8.27	827	0	0	0	0
940	69	8.28	828	0	0	0	0
941	65.9	7.83	783	0	0	0	0
942	64.9	7.83	783	0	0	0	0
943	63.9	7.83	783	0	0	0	0
944	71.6	7.89	789	0	0	0	0
945	55.7	7.81	781	0	0	0	0
946	66.6	7.98	798	0	0	0	0
947	76.1	8.67	867	0	0	0	0
948	82	8.53	853	0	0	0	0
949	58.5	8.36	836	0	0	0	0
950	59.4	8.67	867	0	0	0	0
951	40	8.57	857	0	0	0	0
952	46.2	8.49	849	0	0	0	0
953	60.8	8.67	867	0	0	0	0
954	61.5	9.41	941	0	0	0	0
955	64.7	9.47	947	0	0	0	0
956	68.2	9.12	912	0	0	0	0
957	82	8.58	858	0	0	0	0
958	60.7	8.72	872	0	0	0	0
959	53.2	7.94	794	0	0	0	0
960	69.8	7.39	739	0	0	0	0
961	57.1	7.81	781	0	0	0	0
962	63.7	9.01	901	0	0	0	0
963	53.3	10.68	1068	0	0	0	0
964	27.8	8.40	840	0	0	0	0
965	45.6	8.57	857	0	0	0	0
966	81.4	6.95	695	0	0	0	0
967	80	3.66	366	0	0	0	0
968	81.9	2.34	234	0	0	0	0
969	146.8	2.00	200	0	0	0	0
970	110	2.10	210	0	0	0	0
971	100.4	2.35	235	0	0	0	0
972	120	2.36	236	0	0	0	0
973	125	2.40	240	0	0	0	0
974	104.2	2.45	245	0	0	0	0
975	88	2.55	255	0	0	0	0
976	85	2.51	251	0	0	0	0
977	78	2.56	256	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
978	128.9	2.45	245	0	0	0	0
979	110	2.56	256	0	0	0	0
980	100	2.65	265	0	0	0	0
981	130.5	2.60	260	0	0	0	0
982	148.2	2.75	275	0	0	0	0
983	175.1	2.78	278	0	0	0	0
984	158	2.78	278	0	0	0	0
985	143.3	3.68	368	0	0	0	0
986	177.1	2.65	265	0	0	0	0
987	164.1	2.60	260	0	0	0	0
988	148.8	2.31	231	0	0	0	0
989	147.4	2.17	217	0	0	0	0
990	143.1	2.89	289	0	0	0	0
991	145.5	2.89	289	0	0	0	0
992	144.5	2.90	290	0	0	0	0
993	155.4	3.00	300	0	0	0	0
994	176.8	3.10	310	0	0	0	0
995	176.8	3.20	320	0	0	0	0
996	75.2	3.55	355	0	0	0	0
997	57.5	3.56	356	0	0	0	0
998	95.2	3.50	350	0	0	0	0
999	75.9	3.56	356	0	0	0	0
1000	81.1	3.65	365	0	0	0	0
1001	94.5	3.65	365	0	0	0	0
1002	111.5	3.62	362	0	0	0	0
1003	90.7	3.45	345	0	0	0	0
1004	96.6	3.45	345	0	0	0	0
1005	101.3	3.45	345	0	0	0	0
1006	116.8	3.65	365	0	0	0	0
1007	91.2	3.60	360	0	0	0	0
1008	115.4	3.60	360	0	0	0	0
1009	103.6	3.55	355	0	0	0	0
1010	139.1	3.50	350	0	0	0	0
1011	144.5	3.45	345	0	0	0	0
1012	118.8	3.45	345	0	0	0	0
1013	92.3	3.60	360	0	0	0	0
1014	135.1	3.35	335	0	0	0	0
1015	114.5	3.61	361	0	0	0	0
1016	118.7	3.62	362	0	0	0	0
1017	123.6	3.62	362	0	0	0	0
1018	89.7	3.62	362	0	0	0	0
1019	100.5	3.50	350	0	0	0	0
1020	115.2	3.45	345	0	0	0	0
1021	117.4	3.40	340	0	0	0	0
1022	114.9	3.50	350	0	0	0	0
1023	159.6	3.50	350	0	0	0	0
1024	146.9	3.50	350	0	0	0	0
1025	95	3.50	350	0	0	0	0
1026	245.4	3.45	345	0	0	0	0
1027	221.9	4.00	400	0	0	0	0
1028	198.5	3.90	390	0	0	0	0
1029	224.4	3.95	395	0	0	0	0
1030	252.6	4.10	410	0	0	0	0
1031	255.7	4.20	420	0	0	0	0
1032	261.9	4.25	425	0	0	0	0
1033	257.2	4.35	435	0	0	0	0
1034	266.6	4.35	435	0	0	0	0
1035	200.3	4.20	420	0	0	0	0
1036	189.8	4.20	420	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1037	256.4	4.20	420	0	0	0	0
1038	222.9	4.25	425	0	0	0	0
1039	212.7	4.35	435	0	0	0	0
1040	236.3	4.25	425	0	0	0	0
1041	154.3	5.01	501	0	0	0	0
1042	96	21.52	2148	2	0	0	0
1043	140.4	22.23	2221	1	0	0	0
1044	173.4	22.76	2276	0	0	0	0
1045	160.5	22.76	2276	0	0	0	0
1046	214.2	22.76	2276	0	0	0	0
1047	216.4	21.06	2106	0	0	0	0
1048	173.1	18.51	1851	0	0	0	0
1049	169.2	19.41	1941	0	0	0	0
1050	196.7	20.32	2032	0	0	0	0
1051	257.5	20.32	2032	0	0	0	0
1052	256.3	20.32	2032	0	0	0	0
1053	267.1	25.51	2551	0	0	0	0
1054	210.5	25.51	2551	0	0	0	0
1055	249.9	20.43	2043	0	0	0	0
1056	232	20.46	2046	0	0	0	0
1057	126.8	19.74	1974	0	0	0	0
1058	258.4	20.89	2087	1	0	0	0
1059	270	18.76	1874	1	0	0	0
1060	192.1	20.06	2004	1	0	0	0
1061	193.3	20.25	2023	1	0	0	0
1062	217.6	22.99	2297	1	0	0	0
1063	192.4	19.84	1982	1	0	0	0
1064	254.2	23.15	2311	2	0	0	0
1065	125.8	25.01	2493	4	0	0	0
1066	139.8	18.08	1800	4	0	0	0
1067	133.2	17.61	1755	3	0	0	0
1068	175.1	17.47	1745	1	0	0	0
1069	174.4	17.57	1755	1	0	0	0
1070	113.9	16.02	1600	1	0	0	0
1071	138	15.55	1555	0	0	0	0
1072	103.6	17.57	1755	1	0	0	0
1073	114.5	17.44	1744	0	0	0	0
1074	70.6	17.65	1765	0	0	0	0
1075	69.2	12.25	1225	0	0	0	0
1076	44.3	3.50	350	0	0	0	0
1077	92.3	3.55	355	0	0	0	0
1078	87	3.65	365	0	0	0	0
1079	77.4	3.75	375	0	0	0	0
1080	100	3.65	365	0	0	0	0
1081	80.3	3.45	345	0	0	0	0
1082	141.4	3.55	355	0	0	0	0
1083	169.5	3.56	356	0	0	0	0
1084	165.2	3.54	354	0	0	0	0
1085	132.4	3.65	365	0	0	0	0
1086	78.7	3.60	360	0	0	0	0
1087	140.2	3.50	350	0	0	0	0
1088	138.8	3.45	345	0	0	0	0
1089	154	3.55	355	0	0	0	0
1090	148.9	3.45	345	0	0	0	0
1091	134.3	3.65	365	0	0	0	0
1092	116.3	3.75	375	0	0	0	0
1093	108.2	3.70	370	0	0	0	0
1094	120.4	3.75	375	0	0	0	0
1095	141.1	3.76	376	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1096	133	3.78	378	0	0	0	0
1097	144.4	3.78	378	0	0	0	0
1098	138.9	2.47	247	0	0	0	0
1099	131.2	2.77	277	0	0	0	0
1100	129.1	2.22	222	0	0	0	0
1101	151.8	2.22	222	0	0	0	0
1102	131.3	2.22	222	0	0	0	0
1103	168.6	2.45	245	0	0	0	0
1104	85	2.91	291	0	0	0	0
1105	163.6	3.83	383	0	0	0	0
1106	238.1	3.35	335	0	0	0	0
1107	242.9	1.92	192	0	0	0	0
1108	259.2	1.92	192	0	0	0	0
1109	276.5	1.92	192	0	0	0	0
1110	272.2	1.92	192	0	0	0	0
1111	243.4	1.80	180	0	0	0	0
1112	231.1	1.47	147	0	0	0	0
1113	228.1	1.47	147	0	0	0	0
1114	228.1	1.47	147	0	0	0	0
1115	180.4	1.47	147	0	0	0	0
1116	232.2	1.47	147	0	0	0	0
1117	236.2	2.01	201	0	0	0	0
1118	194.3	4.16	416	0	0	0	0
1119	224.7	4.70	470	0	0	0	0
1120	240.9	4.70	470	0	0	0	0
1121	272.8	9.08	908	0	0	0	0
1122	263.7	9.08	908	0	0	0	0
1123	202.9	9.08	908	0	0	0	0
1124	194.4	9.08	908	0	0	0	0
1125	207.6	12.94	1294	0	0	0	0
1126	211.5	12.94	1294	0	0	0	0
1127	172.8	17.08	1708	0	0	0	0
1128	242.3	23.29	2329	0	0	0	0
1129	245.7	23.29	2329	0	0	0	0
1130	237.7	23.29	2329	0	0	0	0
1131	206.9	23.29	2329	0	0	0	0
1132	232.1	17.59	1759	0	0	0	0
1133	263	17.59	1759	0	0	0	0
1134	214.9	17.59	1759	0	0	0	0
1135	222.9	15.50	1550	0	0	0	0
1136	208.4	9.24	924	0	0	0	0
1137	196.6	9.24	924	0	0	0	0
1138	135.3	9.87	987	0	0	0	0
1139	151.1	12.40	1240	0	0	0	0
1140	98.1	15.98	1598	0	0	0	0
1141	198.6	18.30	1830	0	0	0	0
1142	214.4	18.30	1830	0	0	0	0
1143	194.4	18.30	1830	0	0	0	0
1144	225.2	17.26	1726	0	0	0	0
1145	272.6	13.10	1310	0	0	0	0
1146	243.1	13.10	1310	0	0	0	0
1147	254	13.10	1310	0	0	0	0
1148	238.1	13.10	1310	0	0	0	0
1149	276.3	12.19	1219	0	0	0	0
1150	211.1	11.58	1158	0	0	0	0
1151	251.9	11.58	1158	0	0	0	0
1152	245.1	11.58	1158	0	0	0	0
1153	369.1	12.33	1233	0	0	0	0
1154	257.1	13.46	1346	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1155	282	13.46	1346	0	0	0	0
1156	183.6	13.68	1368	0	0	0	0
1157	288.7	14.56	1456	0	0	0	0
1158	255.7	14.56	1456	0	0	0	0
1159	314.6	14.56	1456	0	0	0	0
1160	285.3	14.56	1456	0	0	0	0
1161	271.9	14.56	1456	0	0	0	0
1162	325.2	17.97	1797	0	0	0	0
1163	246	17.97	1797	0	0	0	0
1164	237.9	17.69	1769	0	0	0	0
1165	301.1	16.56	1656	0	0	0	0
1166	225.4	15.72	1572	0	0	0	0
1167	177.8	15.72	1572	0	0	0	0
1168	253.2	15.91	1591	0	0	0	0
1169	249	16.66	1666	0	0	0	0
1170	107.5	16.85	1685	0	0	0	0
1171	100	11.64	1160	2	0	0	0
1172	127.6	11.15	1111	2	0	0	0
1173	130.8	10.20	1010	5	0	0	0
1174	141	10.30	1020	5	0	0	0
1175	169.3	10.24	1020	2	0	0	0
1176	154	10.44	1040	2	0	0	0
1177	150.5	10.54	1050	2	0	0	0
1178	153.5	10.60	1054	3	0	0	0
1179	104.8	10.67	1065	1	0	0	0
1180	200.3	10.65	1063	1	0	0	0
1181	232.9	10.64	1062	1	0	0	0
1182	185.1	10.49	1045	2	0	0	0
1183	207	10.59	1055	2	0	0	0
1184	196.6	10.39	1035	2	0	0	0
1185	244.5	10.69	1065	2	0	0	0
1186	329.5	10.49	1045	2	0	0	0
1187	231.7	10.58	1054	2	0	0	0
1188	280.6	10.61	1057	2	0	0	0
1189	342.3	10.61	1057	2	0	0	0
1190	259.6	10.63	1057	3	0	0	0
1191	281.3	10.60	1054	3	0	0	0
1192	304	10.60	1054	3	0	0	0
1193	344.5	11.16	1110	3	0	0	0
1194	284	9.96	990	3	0	0	0
1195	288.6	10.58	1054	2	0	0	0
1196	301.5	10.69	1065	2	0	0	0
1197	219	10.69	1065	2	0	0	0
1198	177.2	10.53	1045	4	0	0	0
1199	218.2	10.73	1065	4	0	0	0
1200	230.9	10.83	1075	4	0	0	0
1201	299.3	10.93	1085	4	0	0	0
1202	236	10.08	1000	4	0	0	0
1203	233.5	10.22	1020	1	0	0	0
1204	215.3	10.12	1010	1	0	0	0
1205	184.3	10.26	1020	3	0	0	0
1206	212.2	10.41	1035	3	0	0	0
1207	315.4	10.51	1045	3	0	0	0
1208	240.9	10.69	1065	2	0	0	0
1209	193.6	9.65	965	0	0	0	0
1210	204.5	9.45	945	0	0	0	0
1211	255.3	9.35	935	0	0	0	0
1212	245	9.91	985	3	0	0	0
1213	256.9	9.98	990	4	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1214	232.1	9.83	975	4	0	0	0
1215	220.9	9.73	965	4	0	0	0
1216	165	9.69	965	2	0	0	0
1217	261.8	9.69	965	2	0	0	0
1218	246	9.69	965	2	0	0	0
1219	327.2	9.74	970	2	0	0	0
1220	217.9	9.79	975	2	0	0	0
1221	253.5	9.69	965	2	0	0	0
1222	175	9.79	975	2	0	0	0
1223	210.3	9.69	965	2	0	0	0
1224	281	9.89	985	2	0	0	0
1225	259.3	8.94	890	2	0	0	0
1226	272.8	9.03	895	4	0	0	0
1227	290	9.04	896	4	0	0	0
1228	253.9	9.03	895	4	0	0	0
1229	252	9.03	895	4	0	0	0
1230	285.7	9.98	990	4	0	0	0
1231	326	9.91	985	3	0	0	0
1232	284.3	9.81	975	3	0	0	0
1233	259.3	9.91	985	3	0	0	0
1234	258.7	9.51	945	3	0	0	0
1235	326.1	9.41	935	3	0	0	0
1236	268	9.33	925	4	0	0	0
1237	314.5	9.28	920	4	0	0	0
1238	586.9	9.43	935	4	0	0	0
1239	243.4	9.53	945	4	0	0	0
1240	251	9.63	955	4	0	0	0
1241	236.2	9.71	965	3	0	0	0
1242	239.6	9.78	970	4	0	0	0
1243	202.1	9.73	965	4	0	0	0
1244	269.6	9.72	964	4	0	0	0
1245	278	21.65	2159	3	0	0	0
1246	249.7	21.65	2159	3	0	0	0
1247	285.3	21.67	2159	4	0	0	0
1248	274.2	21.67	2159	4	0	0	0
1249	324.9	21.96	2188	4	0	0	0
1250	237.4	22.57	2247	5	0	0	0
1251	232.7	22.57	2247	5	0	0	0
1252	247.6	22.57	2247	5	0	0	0
1253	245.7	14.89	1483	3	0	0	0
1254	260.7	9.80	974	3	0	0	0
1255	175.3	9.80	974	3	0	0	0
1256	237.3	9.80	974	3	0	0	0
1257	269	8.42	836	3	0	0	0
1258	264.1	9.73	965	4	0	0	0
1259	289.4	8.63	855	4	0	0	0
1260	300	9.73	965	4	0	0	0
1261	193	9.83	975	4	0	0	0
1262	248.7	9.93	985	4	0	0	0
1263	217.4	9.81	975	3	0	0	0
1264	183.8	9.49	945	2	0	0	0
1265	110	9.85	975	5	0	0	0
1266	171.5	9.08	900	4	0	0	0
1267	132.6	9.16	910	3	0	0	0
1268	164.3	9.27	925	1	0	0	0
1269	198	9.35	935	0	0	0	0
1270	219	9.45	945	0	0	0	0
1271	179.1	9.35	935	0	0	0	0
1272	193.3	9.25	925	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1273	191.2	9.20	920	0	0	0	0
1274	191.3	9.25	925	0	0	0	0
1275	201.5	9.37	935	1	0	0	0
1276	226	9.26	920	3	0	0	0
1277	182.3	9.16	910	3	0	0	0
1278	214.5	9.29	925	2	0	0	0
1279	199.1	9.39	935	2	0	0	0
1280	120	9.29	925	2	0	0	0
1281	100.8	3.19	313	3	0	0	0
1282	215.6	3.19	313	3	0	0	0
1283	272.2	3.19	313	3	0	0	0
1284	277	5.00	500	0	0	0	0
1285	273.7	5.00	500	0	0	0	0
1286	268.8	5.00	500	0	0	0	0
1287	270.1	5.00	500	0	0	0	0
1288	259.4	5.95	591	2	0	0	0
1289	301.5	8.77	863	7	0	0	0
1290	345.3	8.77	863	7	0	0	0
1291	274.7	8.77	863	7	0	0	0
1292	322.8	8.77	863	7	0	0	0
1293	305.2	8.77	863	7	0	0	0
1294	392.6	15.97	1581	8	0	0	0
1295	341.5	15.97	1581	8	0	0	0
1296	254.4	15.97	1581	8	0	0	0
1297	339.4	15.97	1581	8	0	0	0
1298	259.3	15.97	1581	8	0	0	0
1299	247.1	24.26	2393	15	1	0	0
1300	264.4	24.26	2393	15	1	0	0
1301	294.7	24.26	2393	15	1	0	0
1302	304.8	24.26	2393	15	1	0	0
1303	311	24.26	2393	15	1	0	0
1304	289.4	12.67	1250	4	3	0	0
1305	256.1	11.42	1125	4	3	0	0
1306	259.3	11.42	1125	4	3	0	0
1307	299.5	11.17	1100	4	3	0	0
1308	317.9	11.17	1100	4	3	0	0
1309	188.5	11.12	1095	4	3	0	0
1310	282	11.07	1090	4	3	0	0
1311	191.2	11.04	1085	5	3	0	0
1312	237.1	10.63	1050	5	1	0	0
1313	222	10.66	1055	4	1	0	0
1314	268.2	10.56	1045	4	1	0	0
1315	235	10.46	1035	4	1	0	0
1316	281.8	10.36	1025	4	1	0	0
1317	167.7	10.43	1026	4	3	0	0
1318	254.1	10.42	1025	4	3	0	0
1319	221.6	10.54	1035	5	3	0	0
1320	323.3	10.52	1035	4	3	0	0
1321	344.9	10.53	1045	4	0	0	0
1322	288.3	10.33	1025	4	0	0	0
1323	250.9	10.08	1000	4	0	0	0
1324	327.2	9.96	986	5	0	0	0
1325	312.1	9.51	935	5	2	0	0
1326	288.5	10.16	1000	5	2	0	0
1327	217.5	10.26	1010	5	2	0	0
1328	259.1	10.36	1020	5	2	0	0
1329	211.8	10.39	1025	4	2	0	0
1330	233.8	10.49	1035	4	2	0	0
1331	216.9	10.57	1045	3	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1332	261	10.62	1050	3	2	0	0
1333	272.1	10.68	1056	3	2	0	0
1334	263.3	10.57	1045	3	2	0	0
1335	290.4	10.87	1075	3	2	0	0
1336	264.4	10.37	1025	3	2	0	0
1337	252.3	10.67	1055	3	2	0	0
1338	250.7	10.57	1045	3	2	0	0
1339	290.9	10.60	1044	5	2	0	0
1340	325.3	10.73	1055	6	2	0	0
1341	297	10.74	1056	6	2	0	0
1342	325.1	10.83	1065	6	2	0	0
1343	357	10.93	1075	6	2	0	0
1344	386.9	11.01	1085	5	2	0	0
1345	311.8	10.86	1075	4	1	0	0
1346	269.8	10.96	1085	4	1	0	0
1347	301.7	10.01	990	4	1	0	0
1348	299.7	10.07	996	4	1	0	0
1349	279.9	10.05	997	4	0	0	0
1350	371.9	10.00	992	4	0	0	0
1351	399.1	10.93	1085	4	0	0	0
1352	329.4	11.03	1095	4	0	0	0
1353	275.7	11.03	1095	4	0	0	0
1354	274.9	10.85	1075	5	0	0	0
1355	344.7	10.30	1020	5	0	0	0
1356	330.1	10.20	1010	5	0	0	0
1357	288.7	10.30	1020	5	0	0	0
1358	284.1	10.35	1025	5	0	0	0
1359	218.8	10.51	1035	5	2	0	0
1360	0.8	10.61	1045	5	2	0	0
1361	101.6	10.59	1046	5	1	0	0
1362	177.4	10.78	1065	5	1	0	0
1363	172.2	10.98	1085	5	1	0	0
1364	185.4	11.02	1085	4	3	0	0
1365	194.4	10.92	1075	4	3	0	0
1366	191.6	11.12	1095	4	3	0	0
1367	200.8	11.12	1095	4	3	0	0
1368	174.6	11.01	1085	5	2	0	0
1369	245.1	10.81	1065	5	2	0	0
1370	195.3	10.91	1075	5	2	0	0
1371	270	10.98	1085	5	1	0	0
1372	250.5	10.09	1000	3	1	0	0
1373	219.9	3.53	342	4	1	0	0
1374	230.5	3.81	370	4	1	0	0
1375	194.7	4.05	391	4	2	0	0
1376	211.1	4.05	391	4	2	0	0
1377	219.3	4.05	391	4	2	0	0
1378	176.6	4.05	391	4	2	0	0
1379	177	6.00	589	4	1	0	0
1380	160	6.73	660	5	1	0	0
1381	147.2	8.70	852	6	2	0	0
1382	116.1	8.70	852	6	2	0	0
1383	217.2	8.70	852	6	2	0	0
1384	174.6	8.70	852	6	2	0	0
1385	208.1	8.70	852	6	2	0	0
1386	219.9	13.00	1278	8	2	0	0
1387	190.4	15.12	1491	9	1	0	0
1388	198.4	15.12	1491	9	1	0	0
1389	236.9	19.52	1932	10	0	0	0
1390	257.8	19.52	1932	10	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1391	224.4	19.52	1932	10	0	0	0
1392	244	19.52	1932	10	0	0	0
1393	206.2	19.52	1932	10	0	0	0
1394	279.6	19.52	1932	10	0	0	0
1395	229.3	18.87	1862	11	1	0	0
1396	282.9	18.87	1862	11	1	0	0
1397	267.6	18.87	1862	11	1	0	0
1398	287.6	18.87	1862	11	1	0	0
1399	277.1	27.05	2676	13	1	0	0
1400	222	29.79	2947	13	2	0	0
1401	205.1	29.79	2947	13	2	0	0
1402	239.3	32.14	3183	14	1	0	0
1403	261.7	41.63	4128	16	1	0	0
1404	169.1	41.63	4128	16	1	0	0
1405	189.5	41.63	4128	16	1	0	0
1406	274.4	41.63	4128	16	1	0	0
1407	229.5	69.97	6957	20	0	0	0
1408	267.4	69.97	6957	20	0	0	0
1409	214.7	69.97	6957	20	0	0	0
1410	233.8	148.18	14747	34	1	0	0
1411	209.1	174.22	17343	38	1	0	0
1412	188.5	174.22	17343	38	1	0	0
1413	234	174.22	17343	38	1	0	0
1414	225.5	139.59	13894	31	1	0	0
1415	252.7	10.00	980	10	0	0	0
1416	284.5	10.07	985	11	0	0	0
1417	249.9	9.68	950	9	0	0	0
1418	210.1	9.84	958	10	2	0	0
1419	281.5	9.98	968	12	2	0	0
1420	252.4	10.00	970	12	2	0	0
1421	210.3	10.07	975	13	2	0	0
1422	226	10.12	980	13	2	0	0
1423	230.9	10.16	982	14	2	0	0
1424	208.7	10.12	980	13	2	0	0
1425	210.8	10.19	985	14	2	0	0
1426	216.5	10.24	987	14	3	0	0
1427	377.2	10.23	986	14	3	0	0
1428	244	8.83	850	12	3	0	0
1429	277.9	8.71	840	11	3	0	0
1430	249.6	2.34	216	6	2	0	0
1431	156.3	4.49	427	8	2	0	0
1432	212.4	4.49	427	8	2	0	0
1433	220	4.49	427	8	2	0	0
1434	190	4.54	430	9	2	0	0
1435	239.2	4.59	435	9	2	0	0
1436	162.2	4.49	427	8	2	0	0
1437	140.8	4.52	427	8	3	0	0
1438	173.6	4.50	427	7	3	0	0
1439	221.9	4.75	450	8	3	0	0
1440	185.7	4.52	425	9	3	0	0
1441	169.6	4.52	427	8	3	0	0
1442	195.9	4.52	427	8	3	0	0
1443	236.6	4.54	427	9	3	0	0
1444	236.7	4.49	430	8	1	0	0
1445	240.4	4.52	435	7	1	0	0
1446	227.8	4.46	427	8	1	0	0
1447	201.3	4.44	427	7	1	0	0
1448	217.5	4.44	427	7	1	0	0
1449	225.2	5.41	520	9	1	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1450	233	5.26	500	10	2	0	0
1451	214.5	3.28	300	8	4	0	0
1452	239.8	3.40	310	9	4	0	0
1453	204.8	3.47	315	10	4	0	0
1454	160	3.54	320	11	4	0	0
1455	131.9	3.47	325	11	0	0	0
1456	180	3.47	325	11	0	0	0
1457	102.2	2.62	250	3	2	0	0
1458	116.1	2.67	255	3	2	0	0
1459	149.3	2.57	245	3	2	0	0
1460	152.1	2.77	265	3	2	0	0
1461	136.3	1.33	119	4	2	0	0
1462	177.6	1.33	119	4	2	0	0
1463	125.6	1.09	98	4	1	0	0
1464	154.1	0.98	87	4	1	0	0
1465	161.5	0.98	87	4	1	0	0
1466	146.7	1.10	101	3	1	0	0
1467	168.6	1.14	105	3	1	0	0
1468	154.1	1.14	105	3	1	0	0
1469	156.4	1.14	105	3	1	0	0
1470	156.3	1.14	105	3	1	0	0
1471	159.3	0.88	79	3	1	0	0
1472	156.7	1.35	119	5	2	0	0
1473	162.4	1.38	122	5	2	0	0
1474	158.5	1.38	122	5	2	0	0
1475	176.9	1.41	125	5	2	0	0
1476	150	1.48	134	4	2	0	0
1477	149.6	1.51	137	4	2	0	0
1478	146.5	1.61	147	4	2	0	0
1479	160.7	1.66	152	4	2	0	0
1480	160.7	1.66	152	4	2	0	0
1481	148	2.17	205	3	2	0	0
1482	140	2.17	205	3	2	0	0
1483	157.3	2.17	205	3	2	0	0
1484	166.6	2.17	205	3	2	0	0
1485	154.1	2.28	215.8	3.1	2	0	0
1486	119.8	2.71	259	3.5	1.8	0	0
1487	115	2.71	259	3.5	1.8	0	0
1488	120	2.71	259	3.5	1.8	0	0
1489	185.1	2.39	227.7	3.6	1.5	0	0
1490	250.1	1.76	165.2	3.9	0.9	0	0
1491	239	1.76	165.2	3.9	0.9	0	0
1492	253.6	1.76	165.2	3.9	0.9	0	0
1493	189	2.14	201.1	4.1	1.7	0	0
1494	232	3.30	308.7	5	3.9	0	0
1495	248.4	3.30	308.7	5	3.9	0	0
1496	293.3	3.30	308.7	5	3.9	0	0
1497	299.5	3.30	308.7	5	3.9	0	0
1498	270.4	5.04	484.4	6.2	2.4	0	0
1499	274.4	5.04	484.4	6.2	2.4	0	0
1500	279.6	5.04	484.4	6.2	2.4	0	0
1501	289.3	5.04	484.4	6.2	2.4	0	0
1502	251.9	5.04	484.4	6.2	2.4	0	0
1503	298.2	26.96	2663.4	14.2	1.5	0	0
1504	248.6	34.27	3389.7	16.9	1.2	0	0
1505	301.8	34.27	3389.7	16.9	1.2	0	0
1506	260.2	34.27	3389.7	16.9	1.2	0	0
1507	324.8	25.57	2526.2	13.2	1.3	0	0
1508	276.7	8.15	799.1	5.7	1.5	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1509	251.3	3.80	367.3	3.9	1.5	0	0
1510	272.6	3.80	367.3	3.9	1.5	0	0
1511	307.7	3.80	367.3	3.9	1.5	0	0
1512	328.1	3.33	319.2	3.9	1.9	0	0
1513	298.8	1.92	174.8	3.9	3	0	0
1514	277.5	1.92	174.8	3.9	3	0	0
1515	267.5	1.92	174.8	3.9	3	0	0
1516	268.8	1.92	174.8	3.9	3	0	0
1517	314.7	1.92	174.8	3.9	3	0	0
1518	279.3	1.70	154.6	3.4	2.9	0	0
1519	344.4	1.30	114.1	4.1	2.6	0	0
1520	325.9	1.10	93.8	4.3	2.4	0	0
1521	331.2	1.10	93.8	4.5	2.4	0	0
1522	278.1	1.11	93.8	4.8	2.4	0	0
1523	266.7	1.04	86.6	5	2.3	0	0
1524	265.2	0.96	79.4	5.2	2.1	0	0
1525	248.7	0.97	79.4	5.6	2.1	0	0
1526	269.3	0.97	78.8	5.7	2.2	0	0
1527	273.4	0.95	76.5	5.7	2.3	0	0
1528	270.9	0.94	75.4	5.8	2.4	0	0
1529	281	0.92	75.4	4.7	2.4	0	0
1530	316.5	0.92	75.4	4.6	2.4	0	0
1531	276.3	0.92	75.4	4.8	2.4	0	0
1532	290.8	0.78	68.6	2.6	1.5	0	0
1533	267.3	0.73	64.2	3.1	0.9	0	0
1534	282.2	0.73	64.2	3.1	0.9	0	0
1535	250.2	0.73	64.2	3.1	0.9	0	0
1536	255.7	0.73	64.2	3.1	0.9	0	0
1537	342.6	0.82	69.8	3.5	1.8	0	0
1538	316.6	0.82	69.8	3.5	1.8	0	0
1539	317.5	0.82	69.8	3.5	1.8	0	0
1540	281.2	0.82	69.8	3.5	1.8	0	0
1541	232.1	0.94	81.8	1.9	2.7	0	0
1542	332.3	0.94	81.8	1.9	2.7	0	0
1543	349	0.94	81.8	1.9	2.7	0	0
1544	287.8	0.94	81.8	1.9	2.7	0	0
1545	330.5	0.69	58	1.7	2.4	0	0
1546	462.9	0.49	40.1	1.5	2.1	0	0
1547	291.1	0.49	40.1	1.5	2.1	0	0
1548	220.9	0.49	40.1	1.5	2.1	0	0
1549	245.2	0.54	43.5	1.8	2.3	0	0
1550	294	0.67	53.7	2.7	2.7	0	0
1551	125.3	0.66	59	2	1	0	0
1552	172.2	0.60	53	2	1	0	0
1553	188.2	0.90	83	2	1	0	0
1554	179.6	1.00	93	2	1	0	0
1555	211.8	1.00	93	2	1	0	0
1556	192.5	1.00	93	2	1	0	0
1557	208.5	1.52	137	3	3	0	0
1558	116.5	1.52	137	3	3	0	0
1559	192.8	1.52	137	3	3	0	0
1560	200.9	2.21	212	3	1	0	0
1561	200	2.21	212	3	1	0	0
1562	216.4	2.21	212	3	1	0	0
1563	181.3	2.59	245	4	2	0	0
1564	174.8	2.59	245	4	2	0	0
1565	200.6	2.68	254	4	2	0	0
1566	183.1	3.06	294	3	2	0	0
1567	179.7	3.06	294	3	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1568	129.9	3.26	312	4	2	0	0
1569	170.2	3.38	324	4	2	0	0
1570	186.5	3.38	324	4	2	0	0
1571	212.4	3.38	324	4	2	0	0
1572	211.9	5.75	556	5	3	0	0
1573	207.2	5.75	556	5	3	0	0
1574	204.8	5.75	556	5	3	0	0
1575	193.2	5.75	556	5	3	0	0
1576	235.2	7.02	686	5	2	0	0
1577	213.9	7.02	686	5	2	0	0
1578	203.6	7.02	686	5	2	0	0
1579	231.6	8.05	786	8	1	0	0
1580	102.7	18.75	1832	17	3	0	0
1581	223.7	18.75	1832	17	3	0	0
1582	233	18.75	1832	17	3	0	0
1583	251.6	18.75	1832	17	3	0	0
1584	281.2	18.75	1832	17	3	0	0
1585	304.3	5.85	565	7	2	0	0
1586	261.5	5.85	565	7	2	0	0
1587	286.9	5.85	565	7	2	0	0
1588	279.6	5.85	565	7	2	0	0
1589	264.1	5.85	565	7	2	0	0
1590	350.7	16.51	1616	16	1	0	0
1591	294	16.51	1616	16	1	0	0
1592	286.1	16.51	1616	16	1	0	0
1593	289.7	16.51	1616	16	1	0	0
1594	295	16.51	1616	16	1	0	0
1595	247.8	35.47	3489	26	2	0	0
1596	335.6	41.80	4113	29	3	0	0
1597	263.3	41.80	4113	29	3	0	0
1598	282.3	36.97	3637	27	2	0	0
1599	274.7	27.36	2685	24	1	0	0
1600	277.8	22.52	2208	22	0	0	0
1601	259.8	22.52	2208	22	0	0	0
1602	333.4	22.52	2208	22	0	0	0
1603	258.1	22.52	2208	22	0	0	0
1604	282.9	24.57	2406	24	1	0	0
1605	276.4	25.61	2505	25	2	0	0
1606	313.5	25.61	2505	25	2	0	0
1607	281.3	25.61	2505	25	2	0	0
1608	370.6	25.61	2505	25	2	0	0
1609	275.7	33.85	3326	28	1	0	0
1610	319	42.11	4147	32	0	0	0
1611	310.2	42.11	4147	32	0	0	0
1612	353.7	42.11	4147	32	0	0	0
1613	284.2	42.11	4147	32	0	0	0
1614	284.2	42.11	4147	32	0	0	0
1615	225.5	44.74	4409	31	1	0	0
1616	362.8	46.51	4585	30	2	0	0
1617	334.6	46.51	4585	30	2	0	0
1618	306.1	35.56	3500	25	2	0	0
1619	303.1	35.41	3485	25	2	0	0
1620	270.5	6.74	650	9	2	0	0
1621	281.4	5.77	555	8	2	0	0
1622	299.6	5.76	552	9	2	0	0
1623	309.6	5.76	552	9	2	0	0
1624	339.2	5.76	552	9	2	0	0
1625	340.3	5.62	538	9	2	0	0
1626	295.9	4.73	453	7	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1627	314.9	2.06	198.1	1.2	1.8	0	0
1628	307	2.06	198.1	1.2	1.8	0	0
1629	314.7	2.06	198.1	1.2	1.8	0	0
1630	313.5	2.06	198.1	1.2	1.8	0	0
1631	366.3	2.51	234.8	4.6	2.3	0	0
1632	327.6	2.66	247	5.8	2.4	0	0
1633	299.1	2.66	247	5.8	2.4	0	0
1634	263.8	2.66	247	5.8	2.4	0	0
1635	293.9	2.66	247	5.8	2.4	0	0
1636	384.1	2.66	247	5.8	2.4	0	0
1637	244.8	2.17	206.9	5	0	0	0
1638	332.2	2.17	206.9	5	0	0	0
1639	252	2.17	206.9	5	0	0	0
1640	270	2.17	206.9	5	0	0	0
1641	262.3	1.97	187.7	4.5	0	0	0
1642	230.3	1.86	178	4.2	0	0	0
1643	213.6	1.86	178	4.2	0	0	0
1644	204.7	1.86	178	4.2	0	0	0
1645	241.9	1.75	166.3	4.5	0	0	0
1646	281.6	1.49	135.7	3.4	2	0	0
1647	250	1.35	119.8	3.1	3.1	0	0
1648	176.1	1.43	128.3	3.1	2.7	0	0
1649	216.4	1.43	128.3	3.1	2.7	0	0
1650	235.9	1.43	128.3	3.1	2.7	0	0
1651	210.9	1.43	128.3	3.1	2.7	0	0
1652	206.1	1.61	149.2	3.1	1.8	0	0
1653	185.7	1.61	149.2	3.1	1.8	0	0
1654	196.9	1.61	149.2	3.1	1.8	0	0
1655	203	1.73	165	3.1	0.7	0	0
1656	194.5	1.82	175.6	3.1	0	0	0
1657	209.3	1.82	175.6	3.1	0	0	0
1658	218.6	1.82	175.6	3.1	0	0	0
1659	199.2	2.08	198.9	3.5	0.6	0	0
1660	207	2.08	198.9	3.5	0.6	0	0
1661	215.9	2.08	198.9	3.5	0.6	0	0
1662	224.1	2.49	239	3.5	0.9	0	0
1663	188.4	2.49	239	3.5	0.9	0	0
1664	173.2	2.56	245.3	3.4	1.2	0	0
1665	201	2.70	257.8	3.3	1.7	0	0
1666	198.7	2.84	270.4	3.2	2.3	0	0
1667	189	2.94	279.9	3.1	2.7	0	0
1668	199.9	3.05	290.3	3.1	2.7	0	0
1669	157.3	3.46	332	3.1	2.5	0	0
1670	17.4	3.29	315	3.1	2.6	0	0
1671	267.9	3.14	298.3	4.1	2.5	0	0
1672	296.8	3.16	299.1	4.6	2.4	0	0
1673	291.1	3.16	299.1	4.6	2.4	0	0
1674	248.8	3.16	299.1	4.6	2.4	0	0
1675	169.8	3.21	306.2	4	2.3	0	0
1676	231	3.29	316.8	3.1	2.1	0	0
1677	264.6	3.29	316.8	3.1	2.1	0	0
1678	346.1	3.29	316.8	3.1	2.1	0	0
1679	277	3.20	308.3	3.1	1.7	0	0
1680	215.5	3.01	291.5	3.1	1	0	0
1681	187.9	2.91	283.1	3.1	0.6	0	0
1682	222.2	2.91	283.1	3.1	0.6	0	0
1683	252.3	3.10	296.4	4.1	1.8	0	0
1684	289	3.20	303.1	4.6	2.4	0	0
1685	285.6	3.20	303.1	4.6	2.4	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1686	262.2	3.20	303.1	4.6	2.4	0	0
1687	285.1	3.28	313	4.1	2.2	0	0
1688	230.4	3.44	332.8	3.1	1.8	0	0
1689	286.1	3.44	332.8	3.1	1.8	0	0
1690	329.3	3.44	332.8	3.1	1.8	0	0
1691	339	3.44	332.8	3.1	1.8	0	0
1692	297.9	7.73	758.2	5.4	1.4	0	0
1693	220.2	12.02	1183.6	7.7	0.9	0	0
1694	285.2	12.02	1183.6	7.7	0.9	0	0
1695	294.5	12.02	1183.6	7.7	0.9	0	0
1696	374	12.02	1183.6	7.7	0.9	0	0
1697	314.8	14.05	1388.9	6.7	1	0	0
1698	316.1	20.16	2004.8	3.9	1.2	0	0
1699	303.1	20.16	2004.8	3.9	1.2	0	0
1700	290.5	20.16	2004.8	3.9	1.2	0	0
1701	289.7	20.16	2004.8	3.9	1.2	0	0
1702	278.5	27.39	2724.9	5	1.5	0	0
1703	308.7	27.39	2724.9	5	1.5	0	0
1704	419.6	27.39	2724.9	5	1.5	0	0
1705	361.7	27.39	2724.9	5	1.5	0	0
1706	326.3	27.39	2724.9	5	1.5	0	0
1707	313.6	27.39	2724.9	5	1.5	0	0
1708	300.9	27.39	2724.9	5	1.5	0	0
1709	356.8	27.39	2724.9	5	1.5	0	0
1710	356.3	65.63	6533	14.2	0.5	0	0
1711	315.9	84.75	8437.1	18.8	0	0	0
1712	291.1	84.75	8437.1	18.8	0	0	0
1713	175.1	84.75	8437.1	18.8	0	0	0
1714	263.7	81.49	8112.3	18.3	0	0	0
1715	285	71.71	7137.9	16.5	0	0	0
1716	307.4	71.71	7137.9	16.5	0	0	0
1717	289.6	71.71	7137.9	16.5	0	0	0
1718	285	71.71	7137.9	16.5	0	0	0
1719	263.8	71.71	7137.9	16.5	0	0	0
1720	305.1	62.48	6218.1	15	0	0	0
1721	312.5	53.25	5298.3	13.5	0	0	0
1722	315.2	53.25	5298.3	13.5	0	0	0
1723	327.6	53.25	5298.3	13.5	0	0	0
1724	329.5	46.84	4657	13	0.4	0	0
1725	338.5	38.29	3801.9	12.3	0.9	0	0
1726	345.8	38.29	3801.9	12.3	0.9	0	0
1727	299.9	38.29	3801.9	12.3	0.9	0	0
1728	327.6	38.29	3801.9	12.3	0.9	0	0
1729	353.7	38.29	3801.9	12.3	0.9	0	0
1730	296.9	38.29	3801.9	12.3	0.9	0	0
1731	291.9	19.08	1894.2	6.9	0	0	0
1732	375.4	19.08	1894.2	6.9	0	0	0
1733	294	19.08	1894.2	6.9	0	0	0
1734	342.4	19.08	1894.2	6.9	0	0	0
1735	312.9	15.63	1550.1	6	0.2	0	0
1736	375.4	1.82	174	2.3	1.2	0	0
1737	258.4	1.82	174	2.3	1.2	0	0
1738	221.7	1.82	174	2.3	1.2	0	0
1739	285.9	1.82	174	2.3	1.2	0	0
1740	215.5	1.82	174	2.3	1.2	0	0
1741	222.6	2.79	262.7	4.7	2.2	0	0
1742	168.5	2.93	278.9	4.6	1.7	0	0
1743	172.1	3.04	291.3	3.8	1.6	0	0
1744	192.7	3.14	303.7	3.1	1.4	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1745	169.4	3.25	316.2	2.3	1.3	0	0
1746	198.4	3.30	322.4	1.9	1.2	0	0
1747	188.4	3.21	312.8	2.4	1	0	0
1748	168.6	3.16	307.9	2.7	0.9	0	0
1749	171.5	3.16	307.9	2.7	0.9	0	0
1750	173.4	3.40	326.5	4.5	1.6	0	0
1751	152.8	3.72	351.2	6.9	2.4	0	0
1752	166.7	3.72	351.2	6.9	2.4	0	0
1753	165	4.02	381.7	7.2	1.9	0	0
1754	152.6	4.46	427.4	7.7	1.2	0	0
1755	143.1	3.93	377.2	6.3	1.1	0	0
1756	167.7	2.86	276.7	3.5	0.9	0	0
1757	116.5	2.86	276.7	3.5	0.9	0	0
1758	167	2.89	277.3	3.8	1.2	0	0
1759	165.2	2.98	279.9	5.4	2.4	0	0
1760	215.2	2.98	279.9	5.4	2.4	0	0
1761	172.8	3.01	284.3	4.6	2.4	0	0
1762	178	3.04	288.7	3.9	2.4	0	0
1763	176.2	3.04	288.7	3.9	2.4	0	0
1764	108.7	2.70	255	3.9	2.4	0	0
1765	99.2	2.53	238.2	3.9	2.4	0	0
1766	281.8	2.53	238.2	3.9	2.4	0	0
1767	378.3	2.53	238.2	3.9	2.4	0	0
1768	332.8	2.50	234.5	3.9	2.4	0	0
1769	310	2.35	219.7	3.9	2.4	0	0
1770	290.4	2.35	219.7	3.9	2.4	0	0
1771	252.4	2.35	219.7	3.9	2.4	0	0
1772	207.1	2.35	219.7	3.9	2.4	0	0
1773	207.1	2.35	219.7	3.9	2.4	0	0
1774	207.1	2.35	219.7	3.9	2.4	0	0
1775	329.7	2.45	231.2	5	1.1	0	0
1776	363.2	2.48	235	5.4	0.6	0	0
1777	233.6	2.48	235	5.4	0.6	0	0
1778	223	2.48	235	5.4	0.6	0	0
1779	276.9	2.49	236.6	4.8	0.8	0	0
1780	240.2	2.51	241.4	3.1	1.2	0	0
1781	271.6	2.51	241.4	3.1	1.2	0	0
1782	272.9	2.51	241.4	3.1	1.2	0	0
1783	246.3	2.54	244.6	3.5	0.7	0	0
1784	280	2.58	249.4	4.2	0	0	0
1785	260.1	2.58	249.4	4.2	0	0	0
1786	275.5	2.58	249.4	4.2	0	0	0
1787	269	2.60	250.2	4	0.5	0	0
1788	271.1	2.62	251	3.9	0.9	0	0
1789	244.8	2.62	251	3.9	0.9	0	0
1790	252.9	2.62	251	3.9	0.9	0	0
1791	225.3	2.62	251	3.9	0.9	0	0
1792	255.6	2.09	196.3	4.1	1.4	0	0
1793	242.1	1.91	178	4.2	1.5	0	0
1794	250.1	1.91	178	4.2	1.5	0	0
1795	291.7	2.30	216.3	3.7	2.2	0	0
1796	275.8	3.09	292.7	2.7	3.6	0	0
1797	284	3.09	292.7	2.7	3.6	0	0
1798	261	3.09	292.7	2.7	3.6	0	0
1799	377.8	3.09	292.7	2.7	3.6	0	0
1800	295.6	3.09	292.7	2.7	3.6	0	0
1801	399.6	3.19	302	3.5	3.4	0	0
1802	221.9	3.61	339.2	6.9	2.7	0	0
1803	304.2	3.61	339.2	6.9	2.7	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1804	311.3	3.61	339.2	6.9	2.7	0	0
1805	369.5	3.61	339.2	6.9	2.7	0	0
1806	369.9	4.23	401	6.4	3	0	0
1807	248.7	6.08	586.2	5	3.9	0	0
1808	261.7	6.08	586.2	5	3.9	0	0
1809	243.9	6.08	586.2	5	3.9	0	0
1810	284.2	8.01	783.5	5.2	2.4	0	0
1811	240.1	9.94	980.8	5.4	0.9	0	0
1812	260.5	9.94	980.8	5.4	0.9	0	0
1813	278	9.94	980.8	5.4	0.9	0	0
1814	310.7	9.94	980.8	5.4	0.9	0	0
1815	316.8	11.14	1097.8	6.2	1.4	0	0
1816	294.9	14.75	1449.1	8.8	2.7	0	0
1817	314.6	14.75	1449.1	8.8	2.7	0	0
1818	249	14.75	1449.1	8.8	2.7	0	0
1819	282.2	14.75	1449.1	8.8	2.7	0	0
1820	267.9	48.38	4776.9	25.3	3.4	0	0
1821	267	59.59	5886.1	30.8	3.6	0	0
1822	316.8	59.59	5886.1	30.8	3.6	0	0
1823	312.6	59.59	5886.1	30.8	3.6	0	0
1824	264.8	59.59	5886.1	30.8	3.6	0	0
1825	346.6	12.78	1259	7.3	1.5	0	0
1826	268.2	12.78	1259	7.3	1.5	0	0
1827	246.1	12.78	1259	7.3	1.5	0	0
1828	249	12.78	1259	7.3	1.5	0	0
1829	289.6	16.23	1597.4	11.5	0.8	0	0
1830	248.5	19.68	1935.9	15.8	0	0	0
1831	266	19.68	1935.9	15.8	0	0	0
1832	263.6	19.68	1935.9	15.8	0	0	0
1833	289.4	19.68	1935.9	15.8	0	0	0
1834	264.6	20.60	2025.5	16.4	0.4	0	0
1835	247.4	24.28	2384.1	18.8	2.1	0	0
1836	150	6.06	580	10	2.1	0	0
1837	156.5	6.07	585	11	0	0	0
1838	157.9	6.11	589	11	0	0	0
1839	191.6	4.68	450	9	0	0	0
1840	160	1.51	132.3	4.6	3	0	0
1841	181.6	1.51	132.3	4.6	3	0	0
1842	158.3	1.54	135.5	4.5	3	0	0
1843	196.8	1.65	148.4	4.2	2.8	0	0
1844	184.7	1.77	161.2	3.9	2.6	0	0
1845	186	1.88	174	3.6	2.4	0	0
1846	177.9	2.00	186.8	3.3	2.2	0	0
1847	136.1	2.12	199.7	3	2	0	0
1848	164.3	2.25	213	3	2	0	0
1849	185.3	2.35	221	4	2	0	0
1850	194.8	2.35	221	4	2	0	0
1851	171.8	2.42	231	4	1	0	0
1852	213	2.42	233	3	1	0	0
1853	178.4	2.42	233	3	1	0	0
1854	177.9	2.44	233	4	1	0	0
1855	193.3	2.43	232	4	1	0	0
1856	176.7	2.43	232	4	1	0	0
1857	204.2	2.43	232	4	1	0	0
1858	198	2.59	240	5	3	0	0
1859	215.5	2.16	200	5	2	0	0
1860	96.7	1.23	113	2	2	0	0
1861	256.8	1.23	113	2	2	0	0
1862	223.1	1.57	141	5	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1863	223.1	1.57	141	5	2	0	0
1864	223.1	1.57	141	5	2	0	0
1865	174.1	1.57	141	5	2	0	0
1866	238.4	1.82	164	3	4	0	0
1867	238.4	1.82	164	3	4	0	0
1868	238.4	1.82	164	3	4	0	0
1869	238.4	1.82	164	3	4	0	0
1870	175.7	1.82	164	3	4	0	0
1871	232.1	1.82	164	3	4	0	0
1872	241	1.79	179	0	0	0	0
1873	233.1	1.79	179	0	0	0	0
1874	245.6	1.79	179	0	0	0	0
1875	271.7	1.79	179	0	0	0	0
1876	286.9	1.79	179	0	0	0	0
1877	240.5	1.99	199	0	0	0	0
1878	172	2.85	281	2	0	0	0
1879	251.2	3.28	322	3	0	0	0
1880	267.2	3.28	322	3	0	0	0
1881	290.4	6.00	581	5	3	0	0
1882	263.6	6.00	581	5	3	0	0
1883	219.6	6.00	581	5	3	0	0
1884	226.3	6.00	581	5	3	0	0
1885	217.7	4.34	418	5	2	0	0
1886	213	3.49	336	5	1	0	0
1887	223.8	3.49	336	5	1	0	0
1888	226.2	3.47	334	5	1	0	0
1889	243.4	3.32	328	2	0	0	0
1890	236.5	3.32	328	2	0	0	0
1891	232.8	3.32	328	2	0	0	0
1892	200.5	5.46	528	6	2	0	0
1893	149.4	5.97	577	7	2	0	0
1894	229.7	5.97	577	7	2	0	0
1895	236.2	5.97	577	7	2	0	0
1896	258.2	5.62	546	5	2	0	0
1897	245.8	5.52	536	5	2	0	0
1898	287.4	5.52	536	5	2	0	0
1899	238.7	5.52	536	5	2	0	0
1900	264.1	5.64	548	5	2	0	0
1901	264.3	5.96	583	5	1	0	0
1902	217.9	5.96	583	5	1	0	0
1903	270	7.55	740	6	1	0	0
1904	239.1	13.92	1366	10	2	0	0
1905	282.2	13.92	1366	10	2	0	0
1906	255.2	13.92	1366	10	2	0	0
1907	265.4	13.92	1366	10	2	0	0
1908	263	13.74	1350	9	2	0	0
1909	223.1	13.79	1355	9	2	0	0
1910	264.4	13.11	1289	8	2	0	0
1911	267.3	16.15	1589	10	2	0	0
1912	264.1	29.95	2952	17	3	0	0
1913	279.6	29.95	2952	17	3	0	0
1914	253.9	29.95	2952	17	3	0	0
1915	228.7	29.95	2952	17	3	0	0
1916	236.9	51.41	5073	31	2	0	0
1917	279.6	51.41	5073	31	2	0	0
1918	262.7	51.41	5073	31	2	0	0
1919	264.4	34.95	3445	22	2	0	0
1920	273.7	2.05	190	3	3	0	0
1921	224.3	2.05	190	3	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1922	246.3	2.05	190	3	3	0	0
1923	244.6	2.05	190	3	3	0	0
1924	273.4	2.29	213	5	2	0	0
1925	232.3	2.34	221	5	1	0	0
1926	247.5	2.34	221	5	1	0	0
1927	264.1	2.34	221	5	1	0	0
1928	265.7	2.20	209	4	1	0	0
1929	229.6	2.05	198	2	1	0	0
1930	200.6	2.05	198	2	1	0	0
1931	107.6	26.00	2552.1	21.6	1.6	0	0
1932	90.8	33.98	3336.8	28.1	1.8	0	0
1933	152.3	37.33	3671.2	26.9	2.7	0	0
1934	184.5	38.45	3782.7	26.5	3	0	0
1935	197.6	38.45	3782.7	26.5	3	0	0
1936	164.6	38.85	3824.4	27	2.3	0	0
1937	171.4	39.46	3886.9	27.7	1.2	0	0
1938	185.3	39.46	3886.9	27.7	1.2	0	0
1939	188.9	39.46	3886.9	27.7	1.2	0	0
1940	183	43.28	4263	29.2	2.1	0	0
1941	183.3	43.28	4263	29.2	2.1	0	0
1942	201.2	45.28	4465.4	28.3	2	0	0
1943	189.8	49.29	4870.1	26.5	1.8	0	0
1944	185.6	49.29	4870.1	26.5	1.8	0	0
1945	187.5	50.70	5009.2	28	1.7	0	0
1946	183.4	54.95	5426.6	32.3	1.2	0	0
1947	163.6	54.95	5426.6	32.3	1.2	0	0
1948	212.5	54.95	5426.6	32.3	1.2	0	0
1949	193.6	53.38	5270.4	31.9	1.3	0	0
1950	202	48.68	4801.9	30.8	1.5	0	0
1951	187.5	48.68	4801.9	30.8	1.5	0	0
1952	188.1	51.22	5052.4	32.7	1.4	0	0
1953	202	56.30	5553.3	36.5	1.2	0	0
1954	186.7	56.30	5553.3	36.5	1.2	0	0
1955	196.5	56.30	5553.3	36.5	1.2	0	0
1956	222.4	70.94	7005.9	41.1	1.8	0	0
1957	195.9	78.26	7732.2	43.5	2.1	0	0
1958	189.4	78.26	7732.2	43.5	2.1	0	0
1959	228.5	78.26	7732.2	43.5	2.1	0	0
1960	180.2	86.35	8545.4	43.4	1	0	0
1961	180.2	40.51	4003.9	23.1	0.2	0	0
1962	100.2	25.57	2514.8	19	1.5	0	0
1963	232.1	23.26	2279.1	19.6	2.4	0	0
1964	382.9	23.26	2279.1	19.6	2.4	0	0
1965	360.8	23.26	2279.1	19.6	2.4	0	0
1966	273.7	23.26	2279.1	19.6	2.4	0	0
1967	252.3	14.76	1444	15	0.8	0	0
1968	266.6	10.52	1026.5	12.7	0	0	0
1969	244.4	10.52	1026.5	12.7	0	0	0
1970	279.2	10.52	1026.5	12.7	0	0	0
1971	318.4	10.52	1026.5	12.7	0	0	0
1972	316	9.48	924.6	10.4	0.8	0	0
1973	276.9	7.40	720.9	5.8	2.4	0	0
1974	278.1	7.40	720.9	5.8	2.4	0	0
1975	285.3	7.40	720.9	5.8	2.4	0	0
1976	260.6	7.40	720.9	5.8	2.4	0	0
1977	275.2	6.27	610.3	5	2.1	0	0
1978	288.6	6.27	610.3	5	2.1	0	0
1979	276.5	6.27	610.3	5	2.1	0	0
1980	252.9	6.27	610.3	5	2.1	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1981	311.7	7.04	681.8	7.9	2.1	0	0
1982	302.8	7.30	705.7	8.8	2.1	0	0
1983	293.6	7.30	705.7	8.8	2.1	0	0
1984	303.7	7.30	705.7	8.8	2.1	0	0
1985	313.3	7.30	705.7	8.8	2.1	0	0
1986	260.9	7.04	680.3	8.6	2	0	0
1987	308.8	5.99	578.5	7.7	1.7	0	0
1988	337.5	5.47	527.7	7.3	1.5	0	0
1989	261.7	5.47	527.7	7.3	1.5	0	0
1990	333.7	5.47	527.7	7.3	1.5	0	0
1991	261.7	22.48	2210.9	16.3	1.5	0	0
1992	333.6	39.50	3894.2	25.4	1.5	0	0
1993	328.3	39.50	3894.2	25.4	1.5	0	0
1994	328.3	39.50	3894.2	25.4	1.5	0	0
1995	240	50.06	4941.9	29.6	1.6	0	0
1996	271.1	81.75	8085	42.3	1.8	0	0
1997	264.2	81.75	8085	42.3	1.8	0	0
1998	268.6	81.75	8085	42.3	1.8	0	0
1999	261.3	81.75	8085	42.3	1.8	0	0
2000	261.2	54.63	5390.5	32.8	2.3	0	0
2001	265.3	45.59	4492.4	29.6	2.4	0	0
2002	259.2	45.59	4492.4	29.6	2.4	0	0
2003	232.1	45.59	4492.4	29.6	2.4	0	0
2004	278.8	45.59	4492.4	29.6	2.4	0	0
2005	237.7	15.42	1507.4	13.5	2.6	0	0
2006	274.7	15.37	1512.4	8.1	2.7	0	0
2007	269.3	15.37	1512.4	8.1	2.7	0	0
2008	314.1	15.37	1512.4	8.1	2.7	0	0
2009	389.3	14.28	1396.6	12.3	2.3	0	0
2010	275.7	41.03	4048.9	25	1.2	0	0
2011	321.8	41.03	4048.9	25	1.2	0	0
2012	268	41.03	4048.9	25	1.2	0	0
2013	244	41.03	4048.9	25	1.2	0	0
2014	218.6	61.49	6073	34.6	2.4	0	0
2015	298.9	61.49	6073	34.6	2.4	0	0
2016	247.3	61.49	6073	34.6	2.4	0	0
2017	289.5	61.49	6073	34.6	2.4	0	0
2018	251	45.96	4518	38.1	0.6	0	0
2019	271.4	45.96	4518	38.1	0.6	0	0
2020	264.2	45.96	4518	38.1	0.6	0	0
2021	248.9	45.96	4518	38.1	0.6	0	0
2022	265.4	31.90	3133.6	26.8	0.8	0	0
2023	225.5	10.81	1056.9	10	1.2	0	0
2024	265.5	10.81	1056.9	10	1.2	0	0
2025	247.5	10.81	1056.9	10	1.2	0	0
2026	128.3	10.65	1041.8	10	1	0	0
2027	207.1	10.04	981.2	9.8	1	0	0
2028	129.1	9.43	920.5	9.7	1	0	0
2029	134.1	8.82	859.9	9.5	0.9	0	0
2030	61.4	8.21	799.2	9.4	0.9	0	0
2031	126.8	7.60	738.6	9.2	0.9	0	0
2032	133.8	7.60	738.6	9.2	0.9	0	0
2033	160.6	8.25	802.2	9	1.5	0	0
2034	190.3	8.57	834	8.8	1.8	0	0
2035	169.4	8.57	834	8.8	1.8	0	0
2036	176.9	16.32	1595	18.5	0	0	0
2037	188.9	16.32	1595	18.5	0	0	0
2038	166.6	16.32	1595	18.5	0	0	0
2039	194.1	6.68	648	8.8	0.9	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2040	178.5	6.68	648	8.8	0.9	0	0
2041	221.7	6.68	648	8.8	0.9	0	0
2042	202.7	6.60	640.2	8.7	0.8	0	0
2043	184.8	6.44	624.7	8.5	0.6	0	0
2044	175.7	6.44	624.7	8.5	0.6	0	0
2045	77.7	5.80	557.9	8.2	2	0	0
2046	269.1	5.59	535.7	8.1	2.4	0	0
2047	133.7	5.59	535.7	8.1	2.4	0	0
2048	295.9	5.96	580.1	6.5	1	0	0
2049	225.5	6.24	613.5	5.4	0	0	0
2050	236.1	6.24	613.5	5.4	0	0	0
2051	318	6.24	613.5	5.4	0	0	0
2052	399.9	6.24	613.5	5.4	0	0	0
2053	311.5	6.24	613.5	5.4	0	0	0
2054	224.3	6.92	671.6	9	0.8	0	0
2055	245.1	7.60	729.8	12.7	1.5	0	0
2056	262.6	7.60	729.8	12.7	1.5	0	0
2057	272.8	7.60	729.8	12.7	1.5	0	0
2058	317.4	7.60	729.8	12.7	1.5	0	0
2059	326.8	7.60	729.8	12.7	1.5	0	0
2060	243	7.57	727.3	12.1	1.7	0	0
2061	283.1	7.47	720.1	10.4	2.1	0	0
2062	284	7.47	720.1	10.4	2.1	0	0
2063	361.9	7.47	720.1	10.4	2.1	0	0
2064	299.6	7.47	720.1	10.4	2.1	0	0
2065	257.5	9.45	916.1	12.4	1.4	0	0
2066	243.4	13.41	1307.9	16.5	0	0	0
2067	237.6	13.41	1307.9	16.5	0	0	0
2068	257.8	13.41	1307.9	16.5	0	0	0
2069	278.1	13.41	1307.9	16.5	0	0	0
2070	227.1	15.37	1505.5	15.2	0.2	0	0
2071	231.3	18.30	1801.9	13.1	0.6	0	0
2072	196.2	18.30	1801.9	13.1	0.6	0	0
2073	240.6	18.30	1801.9	13.1	0.6	0	0
2074	186.8	16.65	1641.9	11.3	0.2	0	0
2075	214.8	16.10	1588.6	10.8	0	0	0
2076	247.6	16.10	1588.6	10.8	0	0	0
2077	259	15.92	1567.6	11	0.9	0	0
2078	266.6	15.56	1525.5	11.3	2.7	0	0
2079	290.3	15.38	1504.4	11.5	3.6	0	0
2080	256.8	15.38	1504.4	11.5	3.6	0	0
2081	263.9	15.38	1504.4	11.5	3.6	0	0
2082	319.3	16.55	1612.3	17.5	2.7	0	0
2083	246.4	17.73	1720.1	23.5	1.8	0	0
2084	246.5	17.73	1720.1	23.5	1.8	0	0
2085	264.8	17.36	1683.8	23	1.9	0	0
2086	316.4	15.87	1538.6	21.3	2	0	0
2087	283.8	15.13	1465.9	20.4	2.1	0	0
2088	291.5	15.13	1465.9	20.4	2.1	0	0
2089	259.1	15.13	1465.9	20.4	2.1	0	0
2090	322	15.13	1465.9	20.4	2.1	0	0
2091	282	9.60	926.6	14.2	1.7	0	0
2092	377.4	4.07	387.3	8.1	1.2	0	0
2093	329.1	4.07	387.3	8.1	1.2	0	0
2094	280.4	4.07	387.3	8.1	1.2	0	0
2095	255.3	4.07	387.3	8.1	1.2	0	0
2096	266.3	2.86	263	6.9	3	0	0
2097	270.8	2.86	263	6.9	3	0	0
2098	281.2	2.86	263	6.9	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2099	272.9	2.86	263	6.9	3	0	0
2100	281.5	3.13	291.5	7.3	2.4	0	0
2101	292.4	3.68	348.4	8.1	1.2	0	0
2102	277.8	3.96	376.9	8.5	0.6	0	0
2103	298.4	3.96	376.9	8.5	0.6	0	0
2104	170.5	1.94	178.4	5.9	1.3	0	0
2105	224.3	1.27	112.3	5	1.5	0	0
2106	263.8	1.27	112.3	5	1.5	0	0
2107	277.1	1.27	112.3	5	1.5	0	0
2108	274.5	2.62	243.8	6.9	1.5	0	0
2109	301.9	6.68	638.3	12.7	1.5	0	0
2110	238.2	6.68	638.3	12.7	1.5	0	0
2111	257.3	6.68	638.3	12.7	1.5	0	0
2112	272.1	16.68	1619.7	22.5	1.1	0	0
2113	326.5	36.67	3582.3	42	0.2	0	0
2114	277.7	41.67	4073	46.9	0	0	0
2115	290.7	41.67	4073	46.9	0	0	0
2116	310.1	41.67	4073	46.9	0	0	0
2117	302.8	22.66	2209.3	27.5	0.6	0	0
2118	269.6	3.65	345.6	8.1	1.2	0	0
2119	276.6	3.65	345.6	8.1	1.2	0	0
2120	273.2	3.27	307.7	7.6	1.4	0	0
2121	402.9	1.73	155.8	5.8	2	0	0
2122	152.3	1.39	122.9	5.5	1.8	0	0
2123	80	1.46	129.7	5.7	1.5	0	0
2124	164.1	1.50	134.7	5.8	1.2	0	0
2125	210.6	1.50	134.7	5.8	1.2	0	0
2126	214.3	1.50	138.7	4.6	0.6	0	0
2127	99.4	1.50	142.7	3.5	0	0	0
2128	171.4	1.50	142.7	3.5	0	0	0
2129	197.5	1.56	145.4	4.5	0.6	0	0
2130	207.4	1.60	146.8	5	0.9	0	0
2131	196.1	1.60	146.8	5	0.9	0	0
2132	188.2	1.61	145.7	5	1.9	0	0
2133	198.9	1.62	145.2	5	2.4	0	0
2134	186.9	1.62	145.2	5	2.4	0	0
2135	197.3	1.62	145.2	5	2.4	0	0
2136	206.8	1.93	172.4	5.8	3	0	0
2137	194.7	1.93	172.4	5.8	3	0	0
2138	192.9	1.93	172.4	5.8	3	0	0
2139	199.1	2.40	220.5	6.5	2.1	0	0
2140	193.7	2.40	220.5	6.5	2.1	0	0
2141	199.6	2.40	220.5	6.5	2.1	0	0
2142	226.8	2.49	234.4	5.3	1.3	0	0
2143	224.4	2.53	241.4	4.6	0.9	0	0
2144	200	2.53	241.4	4.6	0.9	0	0
2145	108.3	2.82	264.2	6.1	2	0	0
2146	224.5	2.59	242.2	7.3	0.6	0	0
2147	222	2.59	242.2	7.3	0.6	0	0
2148	267	2.59	242.2	7.3	0.6	0	0
2149	295.4	2.59	242.2	7.3	0.6	0	0
2150	277.3	2.59	242.2	7.3	0.6	0	0
2151	310.8	2.40	228.6	5	0.6	0	0
2152	275.3	2.40	228.6	5	0.6	0	0
2153	267.4	2.40	228.6	5	0.6	0	0
2154	537.2	2.40	228.6	5	0.6	0	0
2155	463.7	2.40	228.6	5	0.6	0	0
2156	273.3	2.40	228.6	5	0.6	0	0
2157	309.1	3.29	308.7	10	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2158	261.7	3.29	308.7	10	0	0	0
2159	292.2	3.29	308.7	10	0	0	0
2160	281.7	3.29	308.7	10	0	0	0
2161	371.8	3.29	308.7	10	0	0	0
2162	310.4	3.29	308.7	10	0	0	0
2163	375.8	3.90	368.9	10	0.2	0	0
2164	275.1	4.10	388.9	10	0.3	0	0
2165	341.6	4.10	388.9	10	0.3	0	0
2166	246.5	4.08	388.1	9.5	0.2	0	0
2167	244.6	4.00	384.9	7.7	0	0	0
2168	282.7	4.00	384.9	7.7	0	0	0
2169	282.3	4.00	384.9	7.7	0	0	0
2170	257.8	4.00	384.9	7.7	0	0	0
2171	309.8	4.00	384.9	7.7	0	0	0
2172	381	4.66	445.4	8.8	0.9	0	0
2173	403.4	5.15	490.8	9.6	1.5	0	0
2174	304	5.15	490.8	9.6	1.5	0	0
2175	282.1	5.15	490.8	9.6	1.5	0	0
2176	295.5	5.15	490.8	9.6	1.5	0	0
2177	273.9	4.88	467.3	9.6	0.4	0	0
2178	458.2	4.79	459.5	9.6	0	0	0
2179	315.5	4.79	459.5	9.6	0	0	0
2180	251.3	4.79	459.5	9.6	0	0	0
2181	296.7	4.79	459.5	9.6	0	0	0
2182	292.6	4.70	449.9	9.4	0.3	0	0
2183	316.4	4.33	411.4	8.8	1.3	0	0
2184	304.7	4.15	392.1	8.5	1.8	0	0
2185	279.5	4.15	392.1	8.5	1.8	0	0
2186	328.9	4.15	392.1	8.5	1.8	0	0
2187	275.3	3.66	346.4	7.6	1.6	0	0
2188	289	3.50	331.2	7.3	1.5	0	0
2189	300.3	3.50	331.2	7.3	1.5	0	0
2190	277.3	3.50	331.2	7.3	1.5	0	0
2191	291.8	3.70	350.4	7.6	1.5	0	0
2192	281.4	3.77	356.9	7.7	1.5	0	0
2193	274.4	3.77	356.9	7.7	1.5	0	0
2194	282.7	3.77	356.9	7.7	1.5	0	0
2195	285.9	3.77	356.9	7.7	1.5	0	0
2196	290	3.77	356.9	7.7	1.5	0	0
2197	308.6	3.91	370.8	7	2.1	0	0
2198	324.2	4.00	380.1	6.5	2.4	0	0
2199	345.4	4.00	380.1	6.5	2.4	0	0
2200	330.3	4.00	380.1	6.5	2.4	0	0
2201	294	4.14	391.5	7.6	2.3	0	0
2202	300.8	4.54	425.8	10.8	2.1	0	0
2203	284.7	4.54	425.8	10.8	2.1	0	0
2204	267.1	4.54	425.8	10.8	2.1	0	0
2205	295	4.54	425.8	10.8	2.1	0	0
2206	258.5	5.17	490.2	12.8	0.5	0	0
2207	291.7	5.39	511.6	13.5	0	0	0
2208	272.9	5.39	511.6	13.5	0	0	0
2209	288.2	5.39	511.6	13.5	0	0	0
2210	247.9	4.65	439.7	11.2	0.8	0	0
2211	265.3	2.42	223.7	4.2	3.3	0	0
2212	231.8	2.42	223.7	4.2	3.3	0	0
2213	238.4	2.42	223.7	4.2	3.3	0	0
2214	289.1	2.42	223.7	4.2	3.3	0	0
2215	267.3	3.61	342.1	6.5	1.9	0	0
2216	145.5	5.31	507.6	10.7	0.8	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2217	184.5	6.69	637.5	14.6	0.6	0	0
2218	205.8	6.69	637.5	14.6	0.6	0	0
2219	228.9	6.69	637.5	14.6	0.6	0	0
2220	204	7.06	683.2	11.2	0	0	0
2221	206.3	7.06	683.2	11.2	0	0	0
2222	220	7.06	683.2	11.2	0	0	0
2223	214.2	7.06	683.2	11.2	0	0	0
2224	162.1	7.69	735.4	15.4	0.9	0	0
2225	228.1	7.69	735.4	15.4	0.9	0	0
2226	231	7.56	723.8	14.5	1.1	0	0
2227	214.2	7.05	677.6	11.2	1.8	0	0
2228	195.9	7.05	677.6	11.2	1.8	0	0
2229	187.7	7.05	677.6	11.2	1.8	0	0
2230	204.2	8.49	822	10	2.4	0	0
2231	198	8.49	822	10	2.4	0	0
2232	226.3	8.49	822	10	2.4	0	0
2233	212.2	8.49	822	10	2.4	0	0
2234	243.9	7.38	713.7	9.2	1.8	0	0
2235	216.7	7.38	713.7	9.2	1.8	0	0
2236	225.3	7.38	713.7	9.2	1.8	0	0
2237	209.3	2.60	242.7	4.9	2.6	0	0
2238	203	3.78	357	6	3	0	0
2239	238.7	3.78	357	6	3	0	0
2240	215.2	3.94	371	7	3	0	0
2241	255.9	4.03	380	7	3	0	0
2242	212.1	4.03	380	7	3	0	0
2243	227.3	4.03	380	7	3	0	0
2244	150	4.17	392	8	3	0	0
2245	227.3	4.50	426	9	2	0	0
2246	158	4.50	426	9	2	0	0
2247	292.7	4.50	426	9	2	0	0
2248	288.8	4.50	426	9	2	0	0
2249	330.3	5.14	490	9	2	0	0
2250	270.8	5.38	512	10	2	0	0
2251	282	5.38	512	10	2	0	0
2252	304.4	5.38	512	10	2	0	0
2253	296	4.62	440	8	2	0	0
2254	282.1	2.38	224	4	2	0	0
2255	275.8	2.38	224	4	2	0	0
2256	222.9	2.38	224	4	2	0	0
2257	296.6	2.38	224	4	2	0	0
2258	340.3	3.56	342	4	2	0	0
2259	265.7	5.26	508	6	2	0	0
2260	415.5	6.58	638	7	2	0	0
2261	304.7	6.55	638	7	1	0	0
2262	349.3	6.55	638	7	1	0	0
2263	283.1	7.00	683	7	1	0	0
2264	436.8	7.00	683	7	1	0	0
2265	291.8	7.03	683	7	2	0	0
2266	398.9	7.03	683	7	2	0	0
2267	276.6	7.57	735	8	2	0	0
2268	334.5	7.57	735	8	2	0	0
2269	297.4	7.46	724	8	2	0	0
2270	328.7	6.97	678	8	1	0	0
2271	375.9	6.97	678	8	1	0	0
2272	356	6.97	678	8	1	0	0
2273	346.3	8.41	822	8	1	0	0
2274	336.1	8.41	822	8	1	0	0
2275	325.2	8.41	822	8	1	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2276	395.6	8.44	822	8	2	0	0
2277	333.4	7.34	714	7	2	0	0
2278	403.6	7.34	714	7	2	0	0
2279	268.5	7.34	714	7	2	0	0
2280	357.1	2.57	243	4	2	0	0
2281	298.2	3.72	357	3	3	0	0
2282	358	3.74	357	4	3	0	0
2283	343.2	3.88	371	4	3	0	0
2284	310	3.97	380	4	3	0	0
2285	356.8	3.97	380	4	3	0	0
2286	371.1	3.90	380	2	2	0	0
2287	360.5	4.04	392	3	2	0	0
2288	319.3	4.40	426	4	2	0	0
2289	319.4	4.40	426	4	2	0	0
2290	345.8	4.40	426	4	2	0	0
2291	323.7	4.40	426	4	2	0	0
2292	331.7	5.07	490	4	3	0	0
2293	404	5.31	512	5	3	0	0
2294	294.1	5.31	512	5	3	0	0
2295	324.2	5.31	512	5	3	0	0
2296	325.9	4.59	440	5	3	0	0
2297	336.1	2.43	224	5	3	0	0
2298	320.3	2.43	224	5	3	0	0
2299	361.9	2.43	224	5	3	0	0
2300	333.8	2.39	224	3	3	0	0
2301	315.4	3.57	342	3	3	0	0
2302	369.2	5.23	508	3	3	0	0
2303	268.6	6.53	638	3	3	0	0
2304	288.9	6.53	638	3	3	0	0
2305	315	6.53	638	3	3	0	0
2306	321.3	6.98	683	3	3	0	0
2307	267	6.98	683	3	3	0	0
2308	303.5	6.87	683	2	0	0	0
2309	236.7	6.87	683	2	0	0	0
2310	236.7	7.39	735	2	0	0	0
2311	155	8.78	850	14	0	0	0
2312	229.5	8.80	852	14	0	0	0
2313	172.8	8.80	852	14	0	0	0
2314	145	8.92	868	12	0	0	0
2315	184.4	8.92	868	12	0	0	0
2316	200.7	8.92	868	12	0	0	0
2317	187.3	9.03	879	12	0	0	0
2318	201.8	9.57	923	14	2	0	0
2319	211.2	9.94	955	15	3	0	0
2320	227	10.47	1006	16	3	0	0
2321	223.3	12.48	1209	18	1	0	0
2322	249	12.48	1209	18	1	0	0
2323	259.3	12.48	1209	18	1	0	0
2324	230.1	12.48	1209	18	1	0	0
2325	225	8.17	789	11	2	0	0
2326	161.5	8.17	789	11	2	0	0
2327	208.7	8.17	789	11	2	0	0
2328	207.3	7.97	767	12	2	0	0
2329	191.9	7.97	767	12	2	0	0
2330	221.3	7.97	767	12	2	0	0
2331	188	8.57	839	9	0	0	0
2332	199.9	8.57	839	9	0	0	0
2333	217.1	8.57	839	9	0	0	0
2334	222.8	10.40	1014	10	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2335	155	10.40	1014	10	2	0	0
2336	154.3	10.40	1014	10	2	0	0
2337	152.1	13.33	1303	12	2	0	0
2338	164	13.33	1303	12	2	0	0
2339	171.7	13.33	1303	12	2	0	0
2340	193	14.10	1370	17	2	0	0
2341	150	19.04	1852	23	2	0	0
2342	223.3	18.60	1811	23	1	0	0
2343	324.4	16.92	1647	21	1	0	0
2344	245.7	16.48	1605	20	1	0	0
2345	215.6	16.48	1605	20	1	0	0
2346	243.5	15.89	1548	19	1	0	0
2347	246.3	13.45	1319	13	0	0	0
2348	235.2	13.45	1319	13	0	0	0
2349	318	13.45	1319	13	0	0	0
2350	282.3	13.45	1319	13	0	0	0
2351	322.5	14.16	1390	13	0	0	0
2352	429.7	15.09	1485	12	0	0	0
2353	253.8	15.09	1485	12	0	0	0
2354	182.8	15.04	1475	13	1	0	0
2355	209.2	14.73	1436	14	3	0	0
2356	198.1	14.66	1427	15	3	0	0
2357	244	14.66	1427	15	3	0	0
2358	284.9	14.66	1427	15	3	0	0
2359	286.9	14.26	1389	14	3	0	0
2360	238.7	13.46	1314	13	2	0	0
2361	361.7	13.46	1314	13	2	0	0
2362	326.9	13.46	1314	13	2	0	0
2363	298.4	13.79	1347	13	2	0	0
2364	351.3	14.46	1412	14	2	0	0
2365	388.7	15.10	1476	14	2	0	0
2366	388.7	15.77	1541	15	2	0	0
2367	234.9	15.77	1541	15	2	0	0
2368	276.8	15.77	1541	15	2	0	0
2369	272.9	15.77	1541	15	2	0	0
2370	711.5	15.77	1541	15	2	0	0
2371	236.8	17.66	1726	17	2	0	0
2372	268.1	18.12	1772	17	2	0	0
2373	264.3	18.12	1772	17	2	0	0
2374	235.7	18.94	1851	17	3	0	0
2375	230.8	20.51	2008	17	3	0	0
2376	272.6	20.51	2008	17	3	0	0
2377	353.4	20.51	2008	17	3	0	0
2378	326.9	26.03	2554	20	3	0	0
2379	229.4	37.06	3647	25	3	0	0
2380	318.6	37.03	3647	25	2	0	0
2381	294.8	37.03	3647	25	2	0	0
2382	245.2	37.03	3647	25	2	0	0
2383	165	35.23	3471	23	2	0	0
2384	251.9	34.06	3353	22	3	0	0
2385	387.5	34.06	3353	22	3	0	0
2386	276.6	34.06	3353	22	3	0	0
2387	288.2	34.34	3376	23	4	0	0
2388	296.8	34.59	3399	24	4	0	0
2389	319.9	34.59	3399	24	4	0	0
2390	300	34.56	3399	24	3	0	0
2391	297.3	34.56	3399	24	3	0	0
2392	274.1	30.95	3038	24	3	0	0
2393	283.8	20.08	1955	22	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2394	263	20.08	1955	22	3	0	0
2395	281.1	20.08	1955	22	3	0	0
2396	265.3	20.08	1955	22	3	0	0
2397	255.2	18.18	1778	17	2	0	0
2398	263.2	17.55	1719	15	2	0	0
2399	248.9	17.55	1719	15	2	0	0
2400	265.7	17.55	1719	15	2	0	0
2401	278.5	11.88	1158	12	2	0	0
2402	188.2	11.91	1165	10	2	0	0
2403	220	11.81	1155	10	2	0	0
2404	234.4	12.04	1175	10	3	0	0
2405	264.3	11.91	1165	10	2	0	0
2406	155	11.24	1100	9	2	0	0
2407	199.8	11.34	1110	9	2	0	0
2408	221.8	11.39	1115	9	2	0	0
2409	198.7	11.49	1125	9	2	0	0
2410	239.8	11.24	1100	9	2	0	0
2411	268.6	11.42	1115	9	3	0	0
2412	257.3	11.52	1125	9	3	0	0
2413	251.4	11.63	1136	9	3	0	0
2414	257.2	11.57	1132	8	3	0	0
2415	276	11.12	1090	8	2	0	0
2416	215.8	11.07	1085	8	2	0	0
2417	236	10.97	1075	8	2	0	0
2418	266.2	11.54	1131	7	3	0	0
2419	321.1	11.58	1135	7	3	0	0
2420	238	11.61	1136	8	3	0	0
2421	242.6	11.59	1137	8	2	0	0
2422	139.2	11.60	1138	8	2	0	0
2423	229	11.07	1085	8	2	0	0
2424	155	10.95	1075	7	2	0	0
2425	175	11.95	1175	7	2	0	0
2426	269	12.07	1185	8	2	0	0
2427	301.2	12.17	1195	8	2	0	0
2428	268.1	12.10	1185	8	3	0	0
2429	293.7	12.07	1180	9	3	0	0
2430	314.4	11.97	1170	9	3	0	0
2431	304.5	11.32	1110	8	2	0	0
2432	304.5	11.22	1100	8	2	0	0
2433	251.9	11.17	1095	8	2	0	0
2434	257.5	11.20	1098	8	2	0	0
2435	269.3	10.97	1075	8	2	0	0
2436	235	11.05	1085	7	2	0	0
2437	235	10.95	1075	7	2	0	0
2438	235	10.96	1076	7	2	0	0
2439	235	11.15	1095	7	2	0	0
2440	307.9	11.08	1085	7	3	0	0
2441	269.8	11.18	1095	7	3	0	0
2442	255.6	10.98	1075	7	3	0	0
2443	228.4	11.08	1085	7	3	0	0
2444	274.5	10.98	1075	7	3	0	0
2445	257.8	11.06	1085	6	3	0	0
2446	315	10.86	1065	6	3	0	0
2447	263.5	10.96	1075	6	3	0	0
2448	316.6	10.96	1075	6	3	0	0
2449	269.5	11.06	1085	6	3	0	0
2450	343.6	12.06	1185	6	3	0	0
2451	299.1	12.00	1175	8	3	0	0
2452	358.7	11.20	1095	8	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2453	448.3	11.10	1085	8	3	0	0
2454	285.5	10.25	1000	8	3	0	0
2455	266.8	10.32	1010	8	2	0	0
2456	266.3	10.42	1020	8	2	0	0
2457	273.4	10.52	1030	8	2	0	0
2458	293.1	10.67	1045	8	2	0	0
2459	287.9	10.78	1056	8	2	0	0
2460	262.7	11.05	1085	7	2	0	0
2461	461	10.95	1075	7	2	0	0
2462	264.5	12.05	1185	7	2	0	0
2463	354.8	12.18	1195	7	3	0	0
2464	256.1	11.23	1100	7	3	0	0
2465	308.2	11.28	1105	7	3	0	0
2466	285.9	10.48	1025	7	3	0	0
2467	296	10.48	1025	7	3	0	0
2468	269.9	10.98	1075	7	3	0	0
2469	321.1	12.26	1200	7	4	0	0
2470	278	12.37	1210	9	3	0	0
2471	309.8	12.27	1200	9	3	0	0
2472	234.3	12.37	1210	9	3	0	0
2473	242.7	12.57	1230	9	3	0	0
2474	289.3	12.72	1245	9	3	0	0
2475	425.9	12.73	1246	9	3	0	0
2476	322.1	12.27	1200	9	3	0	0
2477	289	12.22	1195	9	3	0	0
2478	299.4	12.24	1196	8	4	0	0
2479	283.7	12.13	1185	8	4	0	0
2480	283.4	12.29	1201	8	4	0	0
2481	276.1	12.29	1201	8	4	0	0
2482	384.2	12.32	1204	8	4	0	0
2483	260.7	12.31	1203	8	4	0	0
2484	297.7	12.30	1205	8	3	0	0
2485	290.4	11.23	1100	7	3	0	0
2486	282.4	11.43	1120	7	3	0	0
2487	229.7	11.48	1125	7	3	0	0
2488	290.3	11.58	1135	7	3	0	0
2489	226.6	11.59	1136	7	3	0	0
2490	264	11.34	1111	7	3	0	0
2491	298.1	11.24	1101	7	3	0	0
2492	228.8	11.50	1125	8	3	0	0
2493	215.5	11.66	1141	8	3	0	0
2494	257	10.83	1050	12	3	0	0
2495	254	10.83	1050	12	3	0	0
2496	266.2	10.83	1050	12	3	0	0
2497	257.8	10.83	1050	12	3	0	0
2498	250.9	12.58	1222	12	4	0	0
2499	230.6	12.83	1245	13	4	0	0
2500	168.4	12.83	1245	13	4	0	0
2501	141.2	12.96	1255	13	5	0	0
2502	107.4	12.97	1256	13	5	0	0
2503	245.6	13.16	1275	13	5	0	0
2504	263.8	13.26	1285	13	5	0	0
2505	308.2	13.28	1285	14	5	0	0
2506	288.3	13.46	1300	14	6	0	0
2507	228.5	13.53	1305	15	6	0	0
2508	202.8	14.50	1400	16	6	0	0
2509	256.5	29.66	2879	33	7	0	0
2510	214.3	31.23	3018	24	19	0	0
2511	124.4	31.47	3018	24	19	6	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2512	275.7	31.47	3018	24	19	6	0
2513	181.3	28.50	2732	28	18	2	0
2514	187.6	27.75	2656	30	17	2	0
2515	147.5	27.75	2656	30	17	2	0
2516	117.7	27.75	2656	30	17	2	0
2517	169	27.75	2656	30	17	2	0
2518	240.1	21.20	2004	30	12	5	0
2519	246.6	21.20	2004	30	12	5	0
2520	213.2	21.20	2004	30	12	5	0
2521	204	21.20	2004	30	12	5	0
2522	165.6	31.97	3055	32	16	5	2
2523	140.9	31.93	3055	32	16	4	2
2524	195.2	31.93	3055	32	16	4	2
2525	252.9	31.87	3051	28	18	4	2
2526	144.8	31.87	3051	28	18	4	2
2527	173.8	31.87	3051	28	18	4	2
2528	248.8	31.74	3017	28	19	6	4
2529	166.1	31.62	3000	28	19	6	5
2530	182.3	31.62	3000	28	19	6	5
2531	177.9	31.54	2987	29	20	6	5
2532	217.6	31.52	2979	30	20	7	5
2533	156.1	31.52	2979	30	20	7	5
2534	148.9	38.91	3709	33	21	7	5
2535	158.5	38.91	3709	33	21	7	5
2536	195.1	38.91	3709	33	21	7	5
2537	206.7	60.10	5800	44	28	7	2
2538	188.3	60.10	5800	44	28	7	2
2539	178.9	60.10	5800	44	28	7	2
2540	167.5	48.28	4638	39	26	6	2
2541	177.6	45.33	4348	38	25	6	2
2542	246.1	45.33	4348	38	25	6	2
2543	184	45.33	4348	38	25	6	2
2544	217.5	33.99	3237	32	18	6	4
2545	231.8	33.99	3237	32	18	6	4
2546	140	33.99	3237	32	18	6	4
2547	142.1	28.23	2691	28	18	3	2
2548	135	28.29	2693	28	18	4	2
2549	138.8	28.43	2699	28	18	6	2
2550	128.1	28.43	2699	28	18	6	2
2551	138	29.22	2780	27	18	6	2
2552	167.8	30.50	2902	27	18	5	4
2553	160	30.50	2902	27	18	5	4
2554	134.6	36.41	3497	28	18	6	2
2555	169.6	36.41	3497	28	18	6	2
2556	173.5	37.81	3621	30	19	7	3
2557	243.9	39.28	3744	32	21	8	5
2558	162.7	39.28	3744	32	21	8	5
2559	162.6	43.38	4147	34	22	8	5
2560	153.1	44.74	4281	35	22	8	5
2561	199.3	44.74	4281	35	22	8	5
2562	221.6	42.33	4067	34	21	5	3
2563	225.4	38.03	3638	32	19	6	4
2564	215.5	38.03	3638	32	19	6	4
2565	155.5	38.03	3638	32	19	6	4
2566	141.2	34.85	3332	29	17	6	4
2567	159.9	31.64	3026	25	16	5	4
2568	190.7	32.35	3099	25	17	5	3
2569	162.7	35.34	3388	23	20	5	4
2570	162.9	35.34	3388	23	20	5	4

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2571	124.8	36.51	3497	29	22	5	2
2572	132.2	37.24	3552	32	23	6	3
2573	134.2	37.24	3552	32	23	6	3
2574	220.9	38.73	3692	33	24	7	3
2575	294	40.70	3879	34	27	8	2
2576	220	40.70	3879	34	27	8	2
2577	182.5	60.86	5776	58	44	13	2
2578	258.3	76.05	7198	76	56	18	3
2579	228.9	64.37	6085	65	49	15	3
2580	248	63.91	6075	55	45	14	3
2581	256.8	63.51	6050	50	46	12	3
2582	273	63.70	6055	52	48	13	3
2583	270	63.51	6045	52	45	13	3
2584	252.4	63.20	6000	53	46	14	4
2585	272.8	63.44	6025	50	47	12	6
2586	200	63.16	5995	52	45	13	6
2587	316.4	62.06	5900	51	42	12	6
2588	209.1	57.85	5500	49	41	11	4
2589	201	65.55	6272	50	40	12	3
2590	310.2	65.55	6272	50	40	12	3
2591	207.7	66.30	6346	52	42	11	2
2592	193.7	66.98	6401	54	43	10	4
2593	200	66.98	6401	54	43	10	4
2594	175	79.60	7621	62	49	12	4
2595	145	4.51	400	7	5	3	2
2596	196.4	4.81	430	7	5	3	2
2597	232.6	3.07	257	6	4	4	2
2598	262.4	2.97	257	6	4	4	0
2599	208	3.58	326	8	4	1	0
2600	209.9	4.00	350	8	6	4	0
2601	116.5	3.64	314	8	6	4	0
2602	110	2.86	241	7	5	4	0
2603	38.8	2.86	241	7	5	4	0
2604	38.8	2.86	241	7	5	4	0
2605	41.4	2.92	248	7	6	3	0
2606	107	2.79	237	8	6	2	0
2607	117.6	2.79	237	8	6	2	0
2608	107.9	2.86	245	7	5	3	0
2609	105.1	2.98	260	7	4	3	0
2610	95.3	2.98	260	7	4	3	0
2611	107.2	3.15	289	7	4	0	0
2612	81.5	2.14	179	7	3	3	0
2613	73.7	2.14	179	7	3	3	0
2614	109.1	2.28	200	5	2	3	0
2615	105.7	2.27	203	6	4	0	0
2616	106.3	2.27	203	6	4	0	0
2617	110	3.23	294	7	5	0	0
2618	223.3	3.23	294	7	5	0	0
2619	218.8	3.07	283	7	2	1	0
2620	258.8	3.03	283	5	2	1	0
2621	264.7	3.03	283	5	2	1	0
2622	256.7	3.01	283	4	2	1	0
2623	245.2	2.75	250	4	3	2	0
2624	189.8	2.90	265	4	3	2	0
2625	240.4	2.90	265	4	3	2	0
2626	255.1	2.79	254	4	3	2	0
2627	245.7	2.97	267	4	2	4	0
2628	247.8	2.99	267	5	2	4	0
2629	145.3	2.99	267	5	2	4	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2630	274.6	2.99	267	5	2	4	0
2631	201.5	2.56	228	5	2	3	0
2632	238.1	2.45	215	6	2	3	0
2633	204.6	2.45	215	6	2	3	0
2634	129.2	2.52	232	5	2	1	0
2635	244.5	2.56	236	5	2	1	0
2636	227.4	2.56	236	5	2	1	0
2637	268.8	2.56	236	5	2	1	0
2638	172.5	2.69	224	7	5	4	0
2639	240	2.70	221	7	5	5	0
2640	261.2	2.70	221	7	5	5	0
2641	270.7	2.68	223	7	5	4	0
2642	256.8	2.51	233	4	2	1	0
2643	172.8	2.51	233	4	2	1	0
2644	164.5	2.45	227	4	2	1	0
2645	184.9	2.41	221	3	2	2	0
2646	228.8	2.41	221	3	2	2	0
2647	153.9	2.53	226	5	3	2	0
2648	146.9	2.62	229	6	3	3	0
2649	200.1	2.62	229	6	3	3	0
2650	196.8	2.40	211	6	3	2	0
2651	214.1	2.74	256	6	2	0	0
2652	201.7	2.84	266	6	2	0	0
2653	126	2.93	275	6	2	0	0
2654	223.9	2.56	240	3	2	1	0
2655	214.7	2.74	254	5	2	1	0
2656	205.9	2.75	255	5	2	1	0
2657	250.2	2.83	265	4	2	1	0
2658	238.3	2.67	245	4	2	2	0
2659	206.6	2.87	265	4	2	2	0
2660	190.7	2.78	256	4	2	2	0
2661	205.5	2.97	275	4	2	2	0
2662	238.8	2.87	265	4	2	2	0
2663	194.4	2.79	257	4	2	2	0
2664	149.7	2.96	274	4	2	2	0
2665	111.7	2.83	265	2	2	2	0
2666	180.8	2.69	245	3	2	3	0
2667	243.4	3.11	285	4	2	3	0
2668	271.8	3.21	295	4	2	3	0
2669	220	3.28	300	5	2	3	0
2670	209.4	3.30	310	5	2	1	0
2671	274.8	3.36	320	5	2	0	0
2672	259.8	3.41	325	5	2	0	0
2673	192.2	3.38	326	3	2	0	0
2674	236.2	3.40	324	3	2	1	0
2675	249.3	3.72	350	4	2	2	0
2676	303.9	3.48	326	4	2	2	0
2677	242.3	3.76	354	4	2	2	0
2678	268.8	3.20	300	5	2	1	0
2679	237.1	3.34	310	5	2	2	0
2680	262.7	3.49	325	5	2	2	0
2681	259	3.74	350	5	2	2	0
2682	232.6	2.09	185	5	2	2	0
2683	298	1.64	140	5	2	2	0
2684	265.1	2.82	250	6	4	2	0
2685	255.9	2.52	220	6	4	2	0
2686	212	2.58	235	5	3	1	0
2687	316.3	2.62	235	5	3	2	0
2688	266.3	2.75	245	6	2	3	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2689	268.7	2.86	256	6	2	3	0
2690	265.4	2.86	260	6	2	2	0
2691	166.9	1.96	186	5	0	0	0
2692	150	1.96	186	5	0	0	0
2693	98.6	1.93	183	5	0	0	0
2694	80.8	1.92	182	5	0	0	0
2695	85.8	1.07	99	4	0	0	0
2696	131.2	1.07	99	4	0	0	0
2697	175	0.87	81	3	0	0	0
2698	156.6	0.81	75	3	0	0	0
2699	160.1	0.81	75	3	0	0	0
2700	133.2	0.85	79	3	0	0	0
2701	147.7	0.95	89	3	0	0	0
2702	134.9	0.95	89	3	0	0	0
2703	128.6	0.97	89	4	0	0	0
2704	131.7	0.99	91	4	0	0	0
2705	127.7	0.89	81	4	0	0	0
2706	114.7	0.73	67	3	0	0	0
2707	125.6	0.69	63	3	0	0	0
2708	135.2	0.55	49	3	0	0	0
2709	156.3	0.54	50	2	0	0	0
2710	139.4	0.59	55	2	0	0	0
2711	131.7	0.60	56	2	0	0	0
2712	135.9	0.61	57	2	0	0	0
2713	78.1	0.62	58	2	0	0	0
2714	141.6	0.91	87	2	0	0	0
2715	122.5	0.91	87	2	0	0	0
2716	115.7	1.00	92	4	0	0	0
2717	99.9	1.00	92	4	0	0	0
2718	118.4	1.13	103	5	0	0	0
2719	119.8	1.13	103	5	0	0	0
2720	137.3	1.10	100	5	0	0	0
2721	120.8	1.10	100	5	0	0	0
2722	132	0.83	77	3	0	0	0
2723	114.4	0.83	77	3	0	0	0
2724	112.2	0.92	84	4	0	0	0
2725	107.8	0.92	84	4	0	0	0
2726	116.9	0.92	84	4	0	0	0
2727	186.7	0.92	84	4	0	0	0
2728	183.8	0.92	84	4	0	0	0
2729	168.8	1.03	93	5	0	0	0
2730	149.4	1.03	93	5	0	0	0
2731	151.1	1.01	93	4	0	0	0
2732	180.2	1.03	95	4	0	0	0
2733	200.7	1.04	98	3	0	0	0
2734	194	1.04	98	3	0	0	0
2735	242.4	1.04	98	3	0	0	0
2736	147.6	1.04	98	3	0	0	0
2737	169.9	1.02	98	2	0	0	0
2738	144.7	1.03	97	3	0	0	0
2739	191.5	1.03	97	3	0	0	0
2740	174.2	1.03	97	3	0	0	0
2741	142.5	1.06	98	4	0	0	0
2742	64.5	1.06	98	4	0	0	0
2743	130.3	1.07	99	4	0	0	0
2744	117.7	1.07	99	4	0	0	0
2745	118.6	1.04	96	4	0	0	0
2746	96.1	0.96	88	4	0	0	0
2747	80	0.91	83	4	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2748	100.1	0.91	83	4	0	0	0
2749	83.2	0.87	81	3	0	0	0
2750	83.2	0.87	81	3	0	0	0
2751	83.2	0.87	81	3	0	0	0
2752	83.2	0.87	81	3	0	0	0
2753	66.4	0.86	80	3	0	0	0
2754	97.5	0.83	77	3	0	0	0
2755	101.5	0.82	78	2	0	0	0
2756	100.9	0.84	80	2	0	0	0
2757	110.5	0.84	80	2	0	0	0
2758	93	0.82	78	2	0	0	0
2759	97.8	0.84	78	3	0	0	0
2760	97.3	0.84	78	3	0	0	0
2761	92	0.82	78	2	0	0	0
2762	92.2	0.85	79	3	0	0	0
2763	90.2	0.83	77	3	0	0	0
2764	86	0.94	88	3	0	0	0
2765	92.3	1.02	94	4	0	0	0
2766	95.3	1.04	96	4	0	0	0
2767	112.1	1.07	99	4	0	0	0
2768	114	1.02	94	4	0	0	0
2769	113.8	0.85	79	3	0	0	0
2770	111.8	0.81	75	3	0	0	0
2771	96.8	0.73	69	2	0	0	0
2772	114.3	0.81	75	3	0	0	0
2773	112.5	1.07	99	4	0	0	0
2774	113.3	1.17	107	5	0	0	0
2775	137.1	1.11	101	5	0	0	0
2776	110	1.20	110	5	0	0	0
2777	112.5	1.25	115	5	0	0	0
2778	108.4	0.98	90	4	0	0	0
2779	118.2	1.05	95	5	0	0	0
2780	143.5	1.03	93	5	0	0	0
2781	144.2	0.97	89	4	0	0	0
2782	127	0.97	89	4	0	0	0
2783	122	1.11	101	5	0	0	0
2784	107.2	1.01	93	4	0	0	0
2785	128.8	0.91	85	3	0	0	0
2786	135.6	0.83	77	3	0	0	0
2787	113.2	0.83	77	3	0	0	0
2788	100	0.70	66	2	0	0	0
2789	195	0.70	66	2	0	0	0
2790	258.6	0.68	66	1	0	0	0
2791	183.3	0.68	66	1	0	0	0
2792	162.7	0.74	70	2	0	0	0
2793	194.4	0.75	71	2	0	0	0
2794	251.7	0.75	71	2	0	0	0
2795	205.2	0.75	71	2	0	0	0
2796	239	0.89	83	3	0	0	0
2797	209.8	0.89	83	3	0	0	0
2798	195	0.89	83	3	0	0	0
2799	238.7	0.89	83	3	0	0	0
2800	197.9	0.85	79	3	0	0	0
2801	210.9	0.85	79	3	0	0	0
2802	198.3	0.85	79	3	0	0	0
2803	209.5	0.90	86	2	0	0	0
2804	206.4	0.93	89	2	0	0	0
2805	199.1	0.93	89	2	0	0	0
2806	167.3	1.03	97	3	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2807	172.3	1.03	97	3	0	0	0
2808	174.2	1.03	97	3	0	0	0
2809	244.4	1.01	93	4	0	0	0
2810	218.7	1.01	93	4	0	0	0
2811	179.4	1.01	93	4	0	0	0
2812	239.7	1.01	93	4	0	0	0
2813	207.1	1.01	95	3	0	0	0
2814	184.5	1.09	103	3	0	0	0
2815	219.5	1.09	103	3	0	0	0
2816	229.8	1.09	103	3	0	0	0
2817	193.4	1.02	96	3	0	0	0
2818	175.3	1.02	96	3	0	0	0
2819	165.2	0.80	76	2	0	0	0
2820	184.2	0.69	67	1	0	0	0
2821	194.5	0.69	67	1	0	0	0
2822	183.4	0.82	80	1	0	0	0
2823	200.7	0.87	85	1	0	0	0
2824	247.7	0.87	85	1	0	0	0
2825	204.7	0.92	90	1	0	0	0
2826	195.4	1.09	103	3	0	0	0
2827	197.6	1.09	103	3	0	0	0
2828	201.9	1.09	103	3	0	0	0
2829	193	0.91	89	1	0	0	0
2830	164.6	0.91	89	1	0	0	0
2831	188.4	0.91	89	1	0	0	0
2832	197.6	0.91	89	1	0	0	0
2833	190.5	1.07	101	3	0	0	0
2834	200.6	1.07	101	3	0	0	0
2835	174.7	1.06	100	3	0	0	0
2836	199	1.02	98	2	0	0	0
2837	211.2	1.02	98	2	0	0	0
2838	205.4	1.02	98	2	0	0	0
2839	197.3	1.04	100	2	0	0	0
2840	232.5	1.07	107	0	0	0	0
2841	235	1.07	107	0	0	0	0
2842	239.5	1.07	107	0	0	0	0
2843	199.7	1.14	112	1	0	0	0
2844	173.6	1.19	115	2	0	0	0
2845	158.2	1.19	115	2	0	0	0
2846	148.4	1.19	115	2	0	0	0
2847	148.4	1.19	115	2	0	0	0
2848	148.4	1.19	115	2	0	0	0
2849	150.9	1.18	114	2	0	0	0
2850	166.3	1.18	114	2	0	0	0
2851	179.1	1.20	116	2	0	0	0
2852	194.8	1.24	118	3	0	0	0
2853	153	1.24	118	3	0	0	0
2854	130.1	1.29	123	3	0	0	0
2855	188.6	1.36	132	2	0	0	0
2856	181.1	1.36	132	2	0	0	0
2857	164.1	1.42	128	4	2	0	0
2858	206.4	1.42	128	4	2	0	0
2859	146.6	1.42	128	4	2	0	0
CHACRA Fm.							
2860	150.3	2.31	217	4	2	0	0
2861	124.9	3.21	307	4	2	0	0
2862	154.6	3.83	367	5	2	0	0
2863	166.1	4.00	387	5	1	0	0
2864	156.9	4.00	387	5	1	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2865	131.7	3.56	343	5	1	0	0
2866	141.7	3.65	350	6	1	0	0
2867	128	3.60	348	6	0	0	0
2868	83.7	3.59	347	6	0	0	0
2869	68.4	2.34	226.9	3	0.4	0	0
2870	84.1	2.50	240.6	3.3	1	0	0
2871	94.1	2.90	277.5	4.2	1.2	0	0
2872	96.6	0.62	52.9	2.3	1.5	0	0
2873	46.8	1.12	98	4	2	0	0
2874	116	1.13	100	5	1	0	0
2875	120.2	1.28	115	5	1	0	0
2876	132.9	1.37	124	5	1	0	0
2877	142.4	1.37	124	5	1	0	0
2878	129.6	1.55	140	6	1	0	0
2879	118.6	1.60	142	6	2	0	0
2880	143.5	1.60	142	6	2	0	0
2881	111.6	1.57	140	5.8	1.9	0	0
2882	149.3	1.47	132.1	5.2	1.5	0	0
2883	141.7	1.37	124.2	4.6	1.1	0	0
2884	157	1.31	120.3	4.2	0.9	0	0
2885	153.7	1.34	123.1	4	1.1	0	0
2886	149	1.37	125.9	3.9	1.2	0	0
2887	157.6	1.37	125.9	3.9	1.2	0	0
2888	139.8	1.37	125.9	3.9	1.2	0	0
2889	148.7	1.37	126	3.9	1.1	0	0
2890	155.5	1.37	126	4	1	0	0
2891	150.7	1.30	120	2	2	0	0
2892	224.3	1.30	120	2	2	0	0
2893	155.8	1.18	111	2	1	0	0
2894	152.4	1.18	111	2	1	0	0
2895	155.9	1.31	119	3	2	0	0
2896	140.8	1.32	120	3	2	0	0
2897	149.7	1.33	126	2	1	0	0
2898	120.8	1.36	129	2	1	0	0
2899	126	1.36	129	2	1	0	0
2900	144.1	1.52	133	5	3	0	0
2901	126.8	1.52	133	5	3	0	0
2902	148.5	1.52	133	5	3	0	0
2903	132.8	1.57	145	3	2	0	0
2904	134.8	1.57	145	3	2	0	0
2905	161.7	1.55	148	2	1	0	0
2906	178.5	1.55	148	2	1	0	0
2907	154.6	1.55	148	2	1	0	0
2908	142	1.71	171	0	0	0	0
2909	155	1.71	171	0	0	0	0
2910	193.7	1.88	177	4	1	0	0
2911	158.9	1.88	177	4	1	0	0
2912	170.8	1.88	177	4	1	0	0
2913	172.2	2.00	183	4	3	0	0
2914	156.9	2.00	183	4	3	0	0
2915	170.4	2.00	183	4	3	0	0
2916	177.6	1.88	176	3	2	0	0
2917	172.8	1.88	176	3	2	0	0
2918	172.4	1.88	176	3	2	0	0
2919	142.4	1.88	176	3	2	0	0
2920	151	1.95	178	4	3	0	0
2921	166.9	1.95	178	4	3	0	0
2922	187.8	1.94	188	3	0	0	0
2923	198.4	1.94	188	3	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2924	167.3	1.95	187	4	0	0	0
2925	146.7	1.95	184	4	1	0	0
2926	139.2	1.94	183	4	1	0	0
2927	162.5	1.94	183	4	1	0	0
2928	137.8	1.96	184	3	2	0	0
2929	157.5	1.90	181	3	1	0	0
2930	153.8	1.77	168	3	1	0	0
2931	153.8	1.63	156	2	1	0	0
2932	153.8	1.47	143	2	0	0	0
2933	139.3	1.47	143	2	0	0	0
2934	154.1	1.51	147	2	0	0	0
2935	142.6	1.66	157	3	1	0	0
2936	142.6	1.75	166	3	1	0	0
2937	153.6	1.75	166	3	1	0	0
2938	172.7	1.75	166	3	1	0	0
2939	194.9	1.79	170	3	1	0	0
2940	168	1.87	179	1	2	0	0
2941	150.8	1.87	179	1	2	0	0
2942	182.5	2.68	252	5	2	0	0
2943	191.3	2.68	252	5	2	0	0
2944	173.7	2.68	252	5	2	0	0
2945	188.5	2.54	238	5	2	0	0
2946	149.7	2.49	233	5	2	0	0
2947	178	2.49	233	5	2	0	0
2948	174.6	3.22	304	6	2	0	0
2949	176.4	4.67	445	8	2	0	0
2950	165.8	6.14	585	10	3	0	0
2951	155.5	4.45	430	6	1	0	0
2952	182.6	4.01	391	5	0	0	0
2953	173.2	4.01	391	5	0	0	0
2954	178.3	2.23	213	2	2	0	0
2955	182.4	2.23	213	2	2	0	0
2956	140.5	2.23	213	2	2	0	0
2957	141.8	1.80	168	3	2	0	0
2958	181.3	1.65	153	3	2	0	0
2959	156.8	1.54	144	2	2	0	0
2960	161.9	1.45	135	2	2	0	0
2961	153.6	1.52	142	2	2	0	0
2962	144.5	1.81	169	3	2	0	0
2963	155.9	1.88	176	3	2	0	0
2964	167.6	2.01	192	3	1	0	0
2965	160.6	2.19	208	4	1	0	0
2966	176.4	1.98	189	3	1	0	0
2967	158.2	1.86	179	2	1	0	0
2968	135.3	1.86	179	2	1	0	0
2969	131.8	0.86	76	2	2	0	0
2970	138.5	0.48	38	2	2	0	0
2971	145.2	1.10	98	3	2	0	0
2972	153.4	1.25	113	3	2	0	0
2973	158.4	1.52	138	4	2	0	0
2974	142.7	1.58	147	4	1	0	0
2975	113.5	1.37	128	3	1	0	0
2976	140.7	1.09	99	2	2	0	0
2977	125.8	1.09	99	2	2	0	0
2978	100	1.93	177	5	2	0	0
2979	153.6	1.93	177	5	2	0	0
2980	164.9	1.76	164	3	2	0	0
2981	100	1.76	164	3	2	0	0
2982	171.4	2.27	214	5	1	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2983	224.6	2.50	238	6	0	0	0
2984	216.5	2.50	238	6	0	0	0
2985	199.3	2.60	247	5	1	0	0
2986	235.8	2.71	256	6	1	0	0
2987	307.7	2.71	256	6	1	0	0
2988	236.4	2.71	256	6	1	0	0
2989	184.1	4.54	440	7	0	0	0
2990	174.3	5.80	562	9	0	0	0
2991	260.9	5.80	562	9	0	0	0
2992	244.2	5.80	562	9	0	0	0
2993	182.8	7.09	693	8	0	0	0
2994	162.5	7.52	736	8	0	0	0
2995	175.3	7.52	736	8	0	0	0
2996	238.8	6.29	615	7	0	0	0
2997	250.6	2.65	251	4	2	0	0
2998	146.6	2.65	251	4	2	0	0
2999	195.5	2.65	251	4	2	0	0
3000	256.9	2.21	207	4	2	0	0
3001	239.5	2.00	184	5	2	0	0
3002	253.9	2.00	184	5	2	0	0
3003	221.5	2.00	184	5	2	0	0
3004	256.8	2.00	184	5	2	0	0
3005	237.7	2.38	224	4	2	0	0
3006	248.7	2.38	224	4	2	0	0
3007	239.4	2.38	224	4	2	0	0
3008	166	2.17	201	5	2	0	0
3009	206.4	1.51	132	5	3	0	0
3010	205.6	1.51	132	5	3	0	0
3011	267.8	1.46	130	5	2	0	0
3012	193.9	1.37	124	5	1	0	0
3013	219.2	1.37	124	5	1	0	0
3014	218.2	1.37	124	5	1	0	0
3015	251.9	1.37	124	5	1	0	0
3016	222.4	1.56	138	6	2	0	0
3017	170.4	1.54	138	5	2	0	0
3018	198	1.51	135	5	2	0	0
3019	146.1	1.38	122	5	2	0	0
3020	201.2	1.28	112	5	2	0	0
3021	215.7	1.28	112	5	2	0	0
3022	199.7	1.30	112	6	2	0	0
3023	206.7	1.56	138	6	2	0	0
3024	167.6	1.71	156	6	1	0	0
3025	228.9	1.71	156	6	1	0	0
3026	217.7	1.97	173	6	4	0	0
3027	280.8	1.99	173	7	4	0	0
3028	249	1.99	173	7	4	0	0
3029	198.6	1.95	173	5	4	0	0
3030	205.9	1.99	183	5	2	0	0
3031	188.6	2.07	197	5	0	0	0
3032	197.9	2.07	197	5	0	0	0
3033	224.2	2.34	221	5	1	0	0
3034	201.9	2.73	257	5	2	0	0
3035	205.5	2.73	257	5	2	0	0
3036	221.6	2.73	257	5	2	0	0
3037	245.6	2.77	259	6	2	0	0
3038	228.8	2.80	265	6	1	0	0
3039	254	2.80	265	6	1	0	0
3040	271.7	2.80	265	6	1	0	0
3041	224.1	2.78	265	5	1	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3042	285.2	2.64	254	5	0	0	0
3043	163.7	2.59	249	5	0	0	0
3044	235.4	2.59	249	5	0	0	0
3045	155	1.63	150	5	1	0	0
3046	193.8	1.61	145	5	2	0	0
3047	216.5	1.26	110	5	2	0	0
3048	220.9	1.44	125	5	3	0	0
3049	222.7	1.60	136	6	4	0	0
3050	305.4	1.60	136	6	4	0	0
3051	263.9	1.58	136	5	4	0	0
3052	280.1	1.58	136	5	4	0	0
3053	296.4	2.67	251	5	2	0	0
3054	218.7	3.00	289	4	1	0	0
3055	274.3	3.00	289	4	1	0	0
3056	289.4	3.00	289	4	1	0	0
3057	227.3	2.84	270	4	2	0	0
3058	233.3	2.71	257	4	2	0	0
3059	204.1	2.71	257	4	2	0	0
3060	195.1	2.71	257	4	2	0	0
3061	275.6	2.72	258	4	2	0	0
3062	178.3	2.87	261	7	4	0	0
3063	172.5	3.04	285	5	3	0	0
3064	127.5	4.08	385	7	3	0	0
3065	165	3.87	366	6	3	0	0
3066	242.9	2.79	262	4	3	0	0
3067	194.8	2.79	262	4	3	0	0
3068	206.6	2.79	262	4	3	0	0
3069	164.2	2.76	253	7	3	0	0
3070	164.2	2.76	253	7	3	0	0
3071	213.7	2.76	253	7	3	0	0
3072	221.4	7.37	692	12	7	0	0
3073	230.6	7.37	692	12	7	0	0
3074	244.1	8.02	751	15	7	0	0
3075	221.9	7.99	751	15	6	0	0
3076	212.2	7.99	751	15	6	0	0
3077	187.2	7.99	751	15	6	0	0
3078	212.2	7.99	751	15	6	0	0
3079	212.4	8.64	818	14	6	0	0
3080	233.5	8.64	818	14	6	0	0
3081	177.9	8.64	818	14	6	0	0
3082	177.3	8.64	818	14	6	0	0
3083	157.3	7.89	750	12	5	0	0
3084	196	7.54	715	12	5	0	0
3085	220.9	7.61	720	13	5	0	0
3086	264.5	6.89	650	12	5	0	0
3087	233.3	6.37	600	11	5	0	0
3088	239.8	6.52	610	12	6	0	0
3089	238.1	6.37	595	12	6	0	0
3090	221.9	6.30	590	11	6	0	0
3091	265.2	6.32	590	12	6	0	0
3092	252.4	10.30	976	18	6	0	0
3093	175	10.13	958	17	7	0	0
3094	207.9	10.13	958	17	7	0	0
3095	230.9	10.13	958	17	7	0	0
3096	234	10.13	958	17	7	0	0
3097	252.8	10.02	938	17	10	0	0
3098	228.2	10.02	938	17	10	0	0
3099	270	10.02	938	17	10	0	0
3100	240.5	9.89	927	16	10	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3101	256.2	9.59	894	16	11	0	0
3102	267.2	9.59	894	16	11	0	0
3103	244.8	9.59	894	16	11	0	0
3104	198.9	9.33	870	15	11	0	0
3105	209.4	8.85	822	15	11	0	0
3106	246.2	8.85	822	15	11	0	0
3107	217.1	8.85	822	15	11	0	0
3108	215.2	9.64	908	16	8	0	0
3109	154	10.09	951	17	8	0	0
3110	222.2	10.09	951	17	8	0	0
3111	190	10.04	946	17	8	0	0
3112	201.3	9.94	941	16	7	0	0
3113	208.9	9.94	941	16	7	0	0
3114	201.9	9.30	879	15	7	0	0
3115	199.4	6.77	632	12	7	0	0
3116	276.9	6.77	632	12	7	0	0
3117	214.5	6.77	632	12	7	0	0
3118	304.8	6.10	570	11	6	0	0
3119	228.4	4.85	447	10	6	0	0
3120	235	4.85	447	10	6	0	0
3121	257.3	4.85	447	10	6	0	0
3122	264.5	4.85	447	10	6	0	0
3123	195.8	3.53	317	9	6	0	0
3124	280.6	3.36	300	9	6	0	0
3125	280.6	3.46	310	9	6	0	0
3126	280.6	3.33	300	9	5	0	0
3127	319.5	3.21	290	8	5	0	0
3128	276.3	3.26	295	8	5	0	0
3129	251.8	3.16	285	8	5	0	0
3130	289.9	2.78	250	8	4	0	0
3131	300.7	2.88	260	8	4	0	0
3132	246.5	2.80	250	9	4	0	0
3133	183	2.73	250	7	3	0	0
3134	206.9	3.18	299	5	3	0	0
3135	213.6	4.76	443	9	5	0	0
3136	188.4	4.76	443	9	5	0	0
3137	229.8	4.76	443	9	5	0	0
3138	228.2	4.28	400	8	4	0	0
3139	197.5	4.38	410	8	4	0	0
3140	193.9	4.53	425	8	4	0	0
3141	214.9	4.27	396	8	5	0	0
3142	173.1	3.70	339	8	5	0	0
3143	180.7	3.95	362	9	5	0	0
3144	202.7	4.92	451	10	7	0	0
3145	189.7	4.92	451	10	7	0	0
3146	174.1	6.04	555	14	7	0	0
3147	210.2	4.42	415	6	5	0	0
3148	170.7	3.26	300	7	4	0	0
3149	268.9	3.76	350	7	4	0	0
3150	276	3.92	366	7	4	0	0
3151	145	3.71	345	7	4	0	0
3152	175.4	4.03	374	7	5	0	0
3153	161.9	4.00	371	7	5	0	0
3154	199.2	3.77	350	6	5	0	0
3155	224.1	3.92	365	6	5	0	0
3156	179.8	3.99	375	6	4	0	0
3157	168.1	3.69	345	6	4	0	0
3158	204.7	3.91	365	7	4	0	0
3159	130.1	3.96	370	7	4	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3160	194	4.01	375	7	4	0	0
3161	144.9	4.21	395	7	4	0	0
3162	131.6	8.95	836	16	9	0	0
3163	131.4	8.95	836	16	9	0	0
3164	164.7	10.30	972	17	8	0	0
3165	142.1	10.30	972	17	8	0	0
3166	142.1	10.30	972	17	8	0	0
3167	214.8	7.61	693	16	12	0	0
3168	204.6	7.02	642	15	10	0	0
3169	206.9	6.62	608	15	8	0	0
3170	275	6.62	608	15	8	0	0
3171	302.4	6.62	608	15	8	0	0
3172	260.5	6.79	627	14	8	0	0
3173	272.1	6.85	633	14	8	0	0
3174	268.7	6.85	633	14	8	0	0
3175	269.6	6.85	633	14	8	0	0
3176	256.1	6.99	651	12	8	0	0
3177	303.8	7.05	657	12	8	0	0
3178	303.8	7.02	657	12	7	0	0
3179	247.9	7.02	657	12	7	0	0
3180	285	7.29	682	13	7	0	0
3181	255.6	8.15	756	19	7	0	0
3182	289.8	8.15	756	19	7	0	0
3183	272.7	8.12	756	19	6	0	0
3184	297.1	8.12	756	19	6	0	0
3185	266.3	7.74	722	17	6	0	0
3186	290.9	7.78	714	17	10	0	0
3187	274.5	7.78	714	17	10	0	0
3188	280.8	7.78	714	17	10	0	0
3189	301.2	7.78	714	17	10	0	0
3190	266.7	7.87	716	17	11	1	0
3191	269.6	8.00	718	17	12	3	0
3192	308.4	8.00	718	17	12	3	0
3193	257.9	8.00	718	17	12	3	0
3194	314.4	7.73	692	16	11	4	0
3195	289.5	7.65	684	16	11	4	0
3196	296	7.65	684	16	11	4	0
3197	267.5	7.65	684	16	11	4	0
3198	293.6	7.65	684	16	11	4	0
3199	314.8	7.65	684	16	11	4	0
3200	294.3	7.52	677	15	11	3	0
3201	222	7.52	677	15	11	3	0
3202	236.3	7.45	670	15	11	3	0
3203	265.5	7.06	641	13	9	3	0
3204	290	7.17	650	14	9	3	0
3205	200	7.54	685	15	9	3	0
3206	299.3	7.54	685	15	9	3	0
3207	311.6	4.44	394	10	6	3	0
3208	263.2	4.33	400	8	3	2	0
3209	320.9	4.58	425	8	3	2	0
3210	321.7	3.83	350	8	3	2	0
3211	297.5	4.43	410	8	3	2	0
3212	283.1	4.40	411	8	3	1	0
3213	326.6	4.54	425	8	3	1	0
3214	349.2	4.64	435	8	3	1	0
3215	287.7	4.54	425	8	3	1	0
3216	307.9	4.21	395	8	2	1	0
3217	354.4	4.13	390	7	3	0	0
3218	301.2	4.21	398	7	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3219	339	4.08	385	7	3	0	0
3220	365.4	3.98	375	7	3	0	0
3221	317.9	3.91	368	7	3	0	0
3222	345.2	4.03	385	6	2	0	0
3223	375.1	4.13	395	6	2	0	0
3224	292	3.93	375	6	2	0	0
3225	355.6	4.05	384	6	3	0	0
3226	318.5	4.05	384	6	3	0	0
3227	310.6	4.06	385	6	3	0	0
3228	451.9	3.96	375	6	3	0	0
3229	300.1	4.00	375	8	3	0	0
3230	301.7	9.32	880	14	8	0	0
3231	250	9.54	885	18	11	0	0
3232	288	9.54	885	18	11	0	0
3233	352.9	9.54	885	18	11	0	0
3234	267.2	10.16	945	19	11	0	0
3235	310.7	10.62	986	20	12	0	0
3236	317.2	10.70	986	20	12	2	0
3237	314.1	10.70	986	20	12	2	0
3238	375	11.72	1079	21	13	3	0
3239	476.7	11.72	1079	21	13	3	0
3240	234	11.72	1079	21	13	3	0
3241	401.2	11.72	1079	21	13	3	0
3242	276.2	11.72	1079	21	13	3	0
3243	344	11.21	1030	20	13	3	0
3244	331.3	11.21	1030	20	13	3	0
3245	324.8	11.21	1030	20	13	3	0
3246	309.4	11.21	1030	20	13	3	0
3247	856.2	11.45	1037	21	14	6	0
3248	236.2	11.45	1037	21	14	6	0
3249	289.5	11.45	1037	21	14	6	0
3250	250.8	11.34	1029	21	13	6	0
3251	220.4	10.84	997	19	11	4	0
3252	273	10.77	990	19	11	4	0
3253	286.3	10.77	990	19	11	4	0
3254	372.3	11.15	1034	16	11	4	0
3255	336.4	11.24	1045	15	11	4	0
3256	336.9	11.24	1045	15	11	4	0
3257	273.6	10.47	968	15	11	4	0
3258	165.1	9.66	891	15	11	3	0
3259	124	9.62	891	15	11	2	0
3260	110	5.72	512	11	10	2	0
3261	110.8	5.72	512	11	10	2	0
3262	134.9	5.72	512	11	10	2	0
3263	141.4	5.67	516	8	9	2	0
3264	108.8	5.61	510	8	9	2	0
3265	157.7	5.43	489	9	8	3	0
3266	138.1	5.43	489	9	8	3	0
3267	141.9	5.43	489	9	8	3	0
3268	146.1	6.11	551	12	8	3	0
3269	100	6.32	572	12	8	3	0
3270	128.7	6.50	590	13	10	1	0
3271	155.2	6.59	596	13	11	1	0
3272	133.8	6.71	608	12	9	3	0
3273	100	7.32	669	12	9	3	0
3274	287.7	7.32	669	12	9	3	0
3275	317.1	7.32	669	12	9	3	0
3276	208.1	7.44	677	12	9	4	0
3277	320	7.66	694	13	10	4	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3278	325.1	7.86	711	13	11	4	0
3279	326.9	7.86	711	13	11	4	0
3280	277.3	7.86	711	13	11	4	0
3281	316.7	7.86	711	13	11	4	0
3282	277.9	8.76	798	15	12	3	0
3283	331.8	9.07	827	16	12	3	0
3284	307.1	9.07	827	16	12	3	0
3285	299.2	9.07	827	16	12	3	0
3286	335.1	9.07	827	16	12	3	0
3287	308	9.01	824	16	11	3	0
3288	323.1	8.97	823	16	10	3	0
3289	313.2	8.97	823	16	10	3	0
3290	313.7	8.97	823	16	10	3	0
3291	253.4	8.85	813	15	10	3	0
3292	298	8.40	776	13	10	2	0
3293	291.9	8.07	747	11	10	2	0
3294	320.4	8.07	747	11	10	2	0
3295	285.4	8.07	747	11	10	2	0
3296	311.2	7.79	720	12	9	2	0
3297	287.6	6.94	639	13	7	2	0
3298	360.2	6.94	639	13	7	2	0
3299	274.4	6.94	639	13	7	2	0
3300	479	6.94	639	13	7	2	0
3301	287.6	6.94	639	13	7	2	0
3302	357.8	6.76	630	10	6	2	0
3303	286.5	6.48	600	11	6	2	0
3304	258.8	6.98	650	11	6	2	0
3305	301.8	7.02	654	11	6	2	0
3306	310.3	7.48	700	11	6	2	0
3307	189.1	5.69	519	12	6	2	0
3308	231.7	13.89	1293	21	14	3	0
3309	234.7	16.13	1498	25	15	5	0
3310	231.5	16.13	1498	25	15	5	0
3311	277.5	16.13	1498	25	15	5	0
3312	338.6	16.13	1498	25	15	5	0
3313	281	5.59	507	9	6	4	0
3314	277.3	5.51	500	10	5	4	0
3315	327.8	5.61	510	10	5	4	0
3316	229.9	5.71	520	10	5	4	0
3317	251	5.68	525	10	5	2	0
3318	294.9	5.39	500	10	5	1	0
3319	307.5	5.66	525	11	5	1	0
3320	270.4	5.67	526	11	5	1	0
3321	344.4	6.19	578	11	5	1	0
3322	317.3	6.23	578	11	5	2	0
3323	290.3	6.26	585	9	5	2	0
3324	257.6	6.26	585	9	5	2	0
3325	262.1	6.16	575	9	5	2	0
3326	321.8	5.61	520	9	5	2	0
3327	282	5.41	500	9	5	2	0
3328	237.3	5.56	515	9	5	2	0
3329	251.3	5.55	514	9	5	2	0
3330	330.6	5.64	523	9	5	2	0
3331	285.8	5.67	526	9	5	2	0
3332	279.7	5.64	524	10	4	2	0
3333	258.5	5.64	524	10	4	2	0
3334	331.1	5.61	521	10	4	2	0
3335	244.4	5.65	525	10	4	2	0
3336	272.4	4.14	378	8	4	2	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3337	247.3	6.80	626	12	6	3	0
3338	329.4	6.80	626	12	6	3	0
3339	283.7	6.80	626	12	6	3	0
3340	324.6	6.80	626	12	6	3	0
3341	306.5	9.86	910	15	10	4	0
3342	339	12.22	1124	18	14	5	0
3343	289.6	12.22	1124	18	14	5	0
3344	306.5	12.22	1124	18	14	5	0
3345	340.2	9.38	862	15	10	4	0
3346	400.9	9.38	862	15	10	4	0
3347	238.4	9.38	862	15	10	4	0
3348	304.9	9.38	862	15	10	4	0
3349	306.1	9.38	862	15	10	4	0
3350	316.6	9.89	913	15	10	4	0
3351	362.2	11.48	1067	16	11	4	0
3352	311.2	11.48	1067	16	11	4	0
3353	173.5	6.53	565	11	10	4	4
3354	68.2	6.62	587	11	10	2	3
3355	45	6.00	536	11	8	2	2
3356	47.7	2.07	175	4	2	2	2
3357	58.8	8.05	729	12	10	3	2
3358	56.9	8.05	729	12	10	3	2
3359	93.9	8.85	811	15	8	5	0
3360	71.8	9.40	850	13	11	4	3
3361	86.8	10.36	965	13	11	3	0
3362	64.1	10.36	965	13	11	3	0
3363	65.4	11.33	1055	15	10	2	2
3364	94.7	11.33	1055	15	10	2	2
3365	84.4	12.71	1156	17	12	5	5
3366	57.3	12.85	1193	17	12	3	2
3367	54.2	12.50	1144	18	13	4	3
3368	62.2	12.50	1144	18	13	4	3
3369	74.4	14.63	1353	21	14	4	2
3370	86.6	14.63	1353	21	14	4	2
3371	69.8	14.65	1341	22	15	5	3
3372	62.6	14.65	1341	22	15	5	3
3373	52.4	12.69	1172	23	13	3	0
3374	54.7	13.07	1200	21	13	4	2
3375	79.1	12.40	1144	19	12	3	2
3376	70.1	10.26	930	15	10	4	4
3377	286.2	10.26	930	15	10	4	4
3378	233.6	8.30	752	11	8	3	4
3379	251.8	8.30	752	11	8	3	4
3380	307.5	8.30	752	11	8	3	4
3381	267.8	8.30	752	11	8	3	4
3382	239.8	8.09	729	11	9	4	3
3383	258.3	7.82	706	10	10	4	2
3384	91.8	12.63	1156	20	14	5	1
3385	252	14.25	1306	23	16	5	1
3386	257	14.25	1306	23	16	5	1
3387	210.8	14.25	1306	23	16	5	1
3388	220.8	14.25	1306	23	16	5	1
3389	203.8	13.43	1228	22	15	4	2
3390	205.4	13.09	1189	22	15	4	3
3391	188.9	11.72	1064	19	13	4	3
3392	257.4	7.62	687	13	9	3	2
3393	293.1	7.62	687	13	9	3	2
3394	277.9	7.62	687	13	9	3	2
3395	314.7	7.62	687	13	9	3	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3396	202.9	7.71	691	13	9	3	3
3397	182.2	7.91	698	13	10	3	5
3398	268.6	7.91	698	13	10	3	5
3399	222.7	7.91	698	13	10	3	5
3400	258.3	9.97	892	17	13	3	4
3401	282.6	16.30	1476	29	20	4	4
3402	250.4	14.57	1315	27	19	4	3
3403	219.3	9.50	835	18	15	6	2
3404	170.9	9.50	835	18	15	6	2
RIO BRAVO Fm.							
3405	236	9.50	835	18	15	6	2
3406	190.5	8.13	750	15	11	0	0
3407	133	7.73	710	15	11	0	0
3408	145.2	14.70	1281	30	25	11	2
3409	186.1	18.27	1598	37	31	13	2
3410	245.5	7.52	641	15	14	6	3
3411	284	7.31	650	12	11	1	4
3412	269.2	7.41	666	12	9	1	4
3413	267	7.29	654	12	9	1	4
3414	356	7.11	654	11	7	1	2
3415	301	7.33	676	11	7	1	2
3416	303.7	7.42	685	11	7	1	2
3417	282.7	7.57	700	11	7	1	2
3418	215.6	7.62	710	11	7	1	1
3419	258.6	7.54	711	11	7	0	0
3420	264.7	7.63	720	11	7	0	0
3421	176.3	7.53	710	11	7	0	0
3422	205.5	11.85	1050	21	20	7	1
3423	228.6	17.69	1565	32	30	10	2
3424	224.5	17.69	1565	32	30	10	2
3425	239.8	18.04	1596	36	29	11	1
3426	241	18.19	1612	38	29	11	0
3427	259	15.29	1349	31	26	10	0
3428	211.9	13.45	1174	27	24	10	1
3429	306.7	10.30	887	22	19	8	2
3430	173.1	7.21	599	18	14	6	4
3431	127.5	6.81	578	16	12	5	3
3432	305.8	6.37	550	14	11	4	2
3433	271.6	6.20	537	14	10	5	1
3434	251.8	6.22	540	14	11	4	1
3435	262.4	6.25	539	13	10	5	2
3436	292.6	6.32	537	12	9	6	4
3437	312	6.32	537	12	9	6	4
3438	254.1	6.32	537	12	9	6	4
3439	240.4	5.83	507	10	10	4	2
3440	172.2	5.69	496	9	11	3	2
3441	301.8	5.69	496	9	11	3	2
3442	252.2	5.69	496	9	11	3	2
3443	249.9	6.11	527	11	12	4	2
3444	306.5	6.78	572	14	13	6	3
3445	318.8	6.78	572	14	13	6	3
3446	265.7	6.78	572	14	13	6	3
3447	214.7	10.66	915	21	19	8	4
3448	221.3	18.38	1602	35	31	12	5
3449	237.3	15.64	1377	31	25	10	2
3450	253.6	13.82	1227	28	21	9	0
3451	258.6	13.82	1227	28	21	9	0
3452	263.1	13.82	1227	28	21	9	0
3453	268.1	13.82	1227	28	21	9	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3454	275.2	12.88	1130	26	18	8	4
3455	321.6	12.56	1097	25	17	7	6
3456	267.5	12.56	1097	25	17	7	6
3457	255.9	12.56	1097	25	17	7	6
3458	251.6	12.56	1097	25	17	7	6
3459	271.6	5.13	450	10	5	2	4
3460	269.6	5.18	455	10	5	2	4
3461	194.5	5.24	457	10	5	3	4
3462	270.5	4.94	425	11	5	3	4
3463	300.6	4.99	435	11	5	3	3
3464	264.8	4.77	410	11	6	3	3
3465	228.9	4.92	425	11	6	3	3
3466	240.8	5.14	445	12	6	3	3
3467	247.3	5.19	450	12	6	3	3
3468	218.1	5.44	475	12	6	3	3
3469	251.6	5.52	485	11	6	3	3
3470	256	5.42	475	11	6	3	3
3471	224.7	5.42	475	11	6	3	3
3472	269.7	5.52	485	11	6	3	3
3473	256.5	4.88	411	10	6	6	3
3474	265	4.88	411	10	6	6	3
3475	238.6	4.90	411	11	6	6	3
3476	250	4.90	411	11	6	6	3
3477	263	8.05	707	13	11	6	3
3478	264.3	11.25	1002	18	16	6	3
3479	271.2	11.25	1002	18	16	6	3
3480	205	12.28	1092	22	18	7	2
3481	293.5	14.38	1272	28	21	8	3
3482	288.3	15.96	1407	33	24	9	3
3483	309.4	15.96	1407	33	24	9	3
3484	278.8	15.96	1407	33	24	9	3
3485	228.8	15.96	1407	33	24	9	3
3486	230.5	14.20	1254	29	22	8	2
3487	288.5	8.95	792	17	14	3	3
3488	276.1	8.95	792	17	14	3	3
3489	262.7	8.95	792	17	14	3	3
3490	231.4	8.95	792	17	14	3	3
3491	277	8.95	792	17	14	3	3
3492	272.6	8.32	724	17	11	4	5
3493	267.3	8.32	724	17	11	4	5
3494	247.7	8.32	724	17	11	4	5
3495	215.6	8.32	724	17	11	4	5
3496	239	8.72	754	18	14	5	4
3497	283.6	8.99	774	18	15	6	4
3498	259.2	8.99	774	18	15	6	4
3499	218.2	8.99	774	18	15	6	4
3500	248.5	19.98	1781	38	27	10	4
3501	250.4	19.98	1781	38	27	10	4
3502	280.9	19.06	1699	37	26	10	3
3503	200.3	15.34	1371	29	21	8	2
3504	213.5	14.50	1289	27	20	8	3
3505	250.3	14.50	1289	27	20	8	3
3506	239.6	5.70	485	12	10	4	3
3507	236.4	5.76	495	12	10	3	3
3508	300.2	5.87	500	12	12	3	3
3509	206.2	5.89	498	11	14	3	3
3510	323.7	5.75	485	13	14	3	2
3511	242.2	7.07	622	17	10	4	1
3512	259.1	7.07	622	17	10	4	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3513	256	7.07	622	17	10	4	1
3514	245.9	7.07	622	17	10	4	1
3515	225.4	7.07	623	17	11	3	1
3516	263.1	7.03	623	17	11	2	1
3517	250.5	7.03	623	17	11	2	1
3518	259.1	6.61	600	12	8	2	1
3519	218.5	6.76	610	12	8	2	2
3520	268.5	6.63	595	11	8	3	2
3521	235.2	6.93	625	11	8	3	2
3522	247.5	6.95	625	12	8	3	2
3523	256.5	6.69	600	13	7	3	2
3524	263	6.69	602	12	7	3	2
3525	320	6.74	603	14	7	3	2
3526	237.5	6.91	625	12	8	2	2
3527	307.1	8.14	706	14	14	7	2
3528	285	10.49	917	20	18	7	2
3529	275	12.78	1127	25	21	7	2
3530	256	15.17	1338	31	25	8	2
3531	256	13.67	1209	27	22	7	2
3532	278	12.15	1080	22	19	6	2
3533	307.1	12.15	1080	22	19	6	2
3534	307.1	11.30	1004	21	18	5	2
3535	307.1	10.46	928	20	16	5	2
3536	259.1	9.64	851	19	15	5	2
3537	345	8.98	794	18	14	4	2
3538	316	9.06	796	19	14	5	2
3539	165	9.19	800	20	15	6	2
3540	194.7	9.21	802	20	15	6	2
3541	165	9.21	802	20	15	6	2
3542	213.3	10.09	884	21	15	7	2
3543	196.1	10.09	884	21	15	7	2
3544	167.2	10.01	873	21	16	7	2
3545	158.7	9.95	858	20	18	7	3
3546	165.7	9.95	858	20	18	7	3
3547	165.7	9.95	858	20	18	7	3
3548	103.2	9.95	858	20	18	7	3
3549	103.2	9.95	858	20	18	7	3
3550	94.3	9.73	848	20	17	6	2
3551	125.7	9.66	839	21	17	6	2
3552	150.8	9.66	839	21	17	6	2
3553	160.2	9.29	800	20	17	7	2
3554	150.1	8.72	742	20	16	8	2
3555	131.8	8.72	742	20	16	8	2
3556	98.7	8.63	735	19	16	8	2
3557	98.7	8.27	710	19	15	6	2
3558	97.1	7.96	685	18	15	5	2
3559	161.2	7.57	659	17	14	3	2
3560	101.4	7.64	670	17	12	6	0
3561	115.5	7.64	670	17	12	6	0
3562	102.1	7.64	670	17	12	6	0
3563	95	8.10	706	19	12	5	2
3564	90	8.22	715	20	12	4	3
3565	120	8.22	715	20	12	4	3
3566	154.3	8.22	715	20	12	4	3
3567	179.2	7.18	631	17	12	3	1
3568	155.2	6.78	603	17	11	2	0
3569	176.8	6.78	603	17	11	2	0
3570	168.2	7.84	688	18	13	4	1
3571	99.5	8.88	774	19	14	6	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3572	123.4	8.95	776	20	15	6	2
3573	251.9	8.91	777	20	15	6	1
3574	163.8	8.91	777	20	15	6	1
3575	190.3	8.95	781	20	13	5	3
3576	178.6	8.99	783	20	12	5	4
3577	205.8	8.99	783	20	12	5	4
3578	188.3	9.37	819	19	14	7	2
3579	231.1	9.76	856	18	16	9	0
3580	192.9	9.76	856	18	16	9	0
3581	178.7	9.60	840	18	16	9	0
3582	192.2	9.17	792	17	15	9	2
3583	212.4	9.17	792	17	15	9	2
3584	148	9.17	792	17	15	9	2
3585	108.9	9.10	788	15	16	6	4
3586	260.4	9.09	787	15	16	6	4
3587	273.8	9.09	787	15	16	6	4
3588	296.2	9.35	813	17	16	5	4
3589	299.1	9.99	863	20	16	7	4
3590	309.3	9.99	863	20	16	7	4
3591	192.2	9.99	863	20	16	7	4
3592	253.6	9.99	863	20	16	7	4
3593	210.5	14.55	1301	29	21	7	1
3594	261.8	16.08	1447	32	23	7	0
3595	239.4	16.08	1447	32	23	7	0
3596	237.2	16.08	1447	32	23	7	0
3597	200.6	13.55	1210	25	21	8	0
3598	232.5	12.32	1092	21	19	9	1
3599	280.4	12.32	1092	21	19	9	1
3600	219.1	12.36	1096	21	19	9	1
3601	199.4	12.59	1107	22	19	9	3
3602	223.3	12.59	1107	22	19	9	3
3603	215.3	12.59	1107	22	19	9	3
3604	177.5	14.88	1314	28	20	7	6
3605	110	10.15	891	21	14	5	4
3606	170.6	4.60	399	9	7	3	2
3607	220	4.24	385	5	4	3	1
3608	189.5	4.34	395	5	4	3	1
3609	222.7	4.26	375	6	6	4	1
3610	197.6	4.43	385	6	7	5	1
3611	187.8	4.53	395	6	7	5	1
3612	160	4.38	375	6	7	5	2
3613	223.8	4.28	365	7	6	4	3
3614	125	4.29	375	7	4	2	4
3615	213.4	1.24	120	2	0	0	0
3616	171	1.24	120	2	0	0	0
3617	253.9	1.04	100	2	0	0	0
3618	241.7	1.04	100	2	0	0	0
3619	197.8	1.04	100	2	0	0	0
3620	120.8	0.92	90	1	0	0	0
3621	166.4	0.92	90	1	0	0	0
3622	232.7	0.92	90	1	0	0	0
3623	214.7	0.92	90	1	0	0	0
3624	295.9	1.76	170	3	0	0	0
3625	94	1.96	190	3	0	0	0
3626	0.3	1.96	190	3	0	0	0
3627	86.3	1.86	180	3	0	0	0
3628	106.2	1.76	170	3	0	0	0
3629	117.9	1.66	160	3	0	0	0
3630	152.8	2.08	200	4	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3631	96.5	2.08	200	4	0	0	0
3632	120.1	2.88	280	4	0	0	0
3633	114.4	1.76	170	3	0	0	0
3634	130.5	1.66	160	3	0	0	0
3635	125.4	2.04	200	2	0	0	0
3636	84.9	2.24	220	2	0	0	0
3637	116.1	3.28	320	4	0	0	0
3638	104	1.38	134	2	0	0	0
3639	119.5	1.46	142	2	0	0	0
3640	82.9	1.55	151	2	0	0	0
3641	82.9	1.66	162	2	0	0	0
3642	99.6	1.68	164	2	0	0	0
3643	140.9	1.75	171	2	0	0	0
3644	47.3	1.83	177	3	0	0	0
3645	0.3	1.83	177	3	0	0	0
3646	118.5	0.48	44	2	0	0	0
3647	56	0.67	61	3	0	0	0
3648	45.1	0.74	72	1	0	0	0
3649	84.6	0.74	72	1	0	0	0
3650	86.8	0.67	65	1	0	0	0
3651	72.7	0.60	58	1	0	0	0
3652	96.7	0.85	79	3	0	0	0
3653	84.6	0.85	79	3	0	0	0
3654	88.2	0.87	81	3	0	0	0
3655	88.4	0.86	86	0	0	0	0
3656	76.4	0.86	86	0	0	0	0
3657	88.4	0.86	80	3	0	0	0
3658	83.2	0.86	80	3	0	0	0
3659	104.1	0.83	79	2	0	0	0
3660	105.1	0.93	89	2	0	0	0
3661	84	1.13	109	2	0	0	0
3662	80.9	1.17	111	3	0	0	0
3663	99.4	1.17	111	3	0	0	0
3664	82.1	1.17	111	3	0	0	0
3665	82.6	1.19	115	2	0	0	0
3666	65.3	1.26	120	3	0	0	0
3667	88.2	1.26	120	3	0	0	0
3668	116.4	1.34	128	3	0	0	0
3669	92.1	1.35	129	3	0	0	0
3670	104.5	1.35	129	3	0	0	0
3671	87.8	1.43	139	2	0	0	0
3672	102.9	1.43	139	2	0	0	0
3673	84.3	1.37	133	2	0	0	0
3674	105.6	1.37	133	2	0	0	0
3675	68.8	1.39	131	4	0	0	0
3676	68.8	1.39	131	4	0	0	0
3677	68.8	1.39	131	4	0	0	0
3678	44.5	1.25	119	3	0	0	0
3679	59.5	1.04	100	2	0	0	0
3680	72.5	1.94	190	2	0	0	0
3681	112.2	1.94	190	2	0	0	0
3682	76.4	1.94	190	2	0	0	0
3683	96.1	2.67	253	7	0	0	0
3684	90.5	3.54	334	10	0	0	0
3685	92.7	3.54	334	10	0	0	0
3686	102	2.47	233	7	0	0	0
3687	132.7	2.47	233	7	0	0	0
3688	117.8	2.30	218	6	0	0	0
3689	123.4	2.03	195	4	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3690	114.8	2.69	261	4	0	0	0
3691	109.7	2.67	261	3	0	0	0
3692	102.6	3.44	330	7	0	0	0
3693	104.7	3.44	330	7	0	0	0
3694	84.9	3.48	332	8	0	0	0
3695	77.8	3.58	342	5	2	0	0
3696	82.4	3.58	342	5	2	0	0
3697	150.5	2.89	271	6	2	0	0
3698	90.3	2.38	227	4	1	0	0
3699	78.1	2.00	189	4	1	0	0
3700	86.9	2.00	189	4	1	0	0
3701	75.6	1.73	166	2	1	0	0
3702	83.5	1.76	167	3	1	0	0
3703	105.3	1.81	167	4	2	0	0
3704	81.9	1.96	182	4	2	0	0
3705	92.7	1.96	182	4	2	0	0
3706	114.7	2.37	225	3	2	0	0
3707	114.2	2.37	225	3	2	0	0
3708	88.4	2.27	217	2	2	0	0
3709	80.9	2.27	217	2	2	0	0
3710	80.9	2.27	217	2	2	0	0
3711	77.6	2.46	234	3	2	0	0
3712	122.4	2.30	211	5	3	0	0
3713	91.2	2.30	211	5	3	0	0
3714	104.5	1.95	188	2	1	0	0
3715	104.5	1.95	188	2	1	0	0
3716	121.9	1.86	179	2	1	0	0
3717	106.9	1.81	174	2	1	0	0
3718	80.5	1.82	170	3	2	0	0
3719	76.6	1.75	163	3	2	0	0
3720	86	1.58	151	2	1	0	0
3721	82	1.59	147	3	2	0	0
3722	88.4	1.60	151	3	1	0	0
3723	76.1	1.81	165	5	2	0	0
3724	90.6	1.88	172	5	2	0	0
3725	74.9	1.99	180	5	3	0	0
3726	71.2	1.91	177	4	2	0	0
3727	90.7	1.91	177	4	2	0	0
3728	82	1.64	145	5	3	0	0
3729	105.8	1.24	110	4	2	0	0
3730	100.2	1.79	160	5	3	0	0
3731	101.4	1.79	160	5	3	0	0
3732	82.6	1.79	160	5	3	0	0
3733	100	1.79	160	5	3	0	0
3734	88.7	1.79	160	5	3	0	0
3735	76.2	1.35	121	4	2	0	0
3736	108.5	1.86	167	5	3	0	0
3737	111.9	1.89	170	5	3	0	0
3738	93.2	1.92	173	5	3	0	0
3739	73.1	1.92	173	5	3	0	0
3740	62.8	1.67	151.2	4.1	2.4	0	0
3741	39.6	1.18	106	3	2	0	0
3742	42.4	1.26	112	4	2	0	0
3743	75.4	2.15	196	5	3	0	0
3744	87.4	3.56	330	10	2	0	0
3745	68.6	2.47	221	7	4	0	0
3746	83.7	2.05	188	7	1	0	0
3747	60.9	2.02	192	5	0	0	0
3748	17.3	2.79	261	6	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3749	130.5	2.89	272	7	1	0	0
3750	98.5	2.89	272	7	1	0	0
3751	83.6	2.90	273	7	1	0	0
3752	131.2	2.90	273	7	1	0	0
3753	125.8	3.13	298	6	1	0	0
3754	127.5	3.78	358	10	0	0	0
3755	111.1	3.78	358	10	0	0	0
3756	112.4	3.33	304	7	5	0	0
3757	118	3.33	304	7	5	0	0
3758	109.2	3.13	288	5	5	0	0
3759	107.5	3.13	288	5	5	0	0
3760	126.3	3.21	300	6	3	0	0
3761	107.8	3.22	304	6	2	0	0
3762	111.2	3.22	304	6	2	0	0
3763	124.8	3.35	316	8	1	0	0
3764	150.9	3.35	316	8	1	0	0
3765	115.1	4.19	393	10	2	0	0
3766	131.7	4.19	393	10	2	0	0
3767	122.9	4.24	395	10	3	0	0
3768	125.2	4.24	395	10	3	0	0
3769	112.8	4.13	384	10	3	0	0
3770	115.8	3.93	369	9	2	0	0
3771	119.9	3.78	354	9	2	0	0
3772	153.9	3.04	281	7	3	0	0
3773	112.3	3.04	281	7	3	0	0
3774	107.8	2.61	245	5	2	0	0
3775	124.2	2.61	245	5	2	0	0
3776	115.8	2.61	245	5	2	0	0
3777	105.3	1.98	176	6	2	1	0
3778	140.4	1.98	180	6	2	0	0
3779	138.6	1.98	180	6	2	0	0
3780	96.7	1.84	164	5	2	1	0
3781	113.1	2.13	199	7	0	0	0
3782	95.1	2.13	199	7	0	0	0
3783	106.6	2.13	194	5	3	0	0
3784	83.3	2.13	194	5	3	0	0
3785	117.5	2.09	192	5	1	1	0
3786	106.7	2.09	192	5	1	1	0
3787	111.8	2.01	181	5	2	1	0
3788	112.5	2.01	181	5	2	1	0
3789	115.9	1.90	173	5	1	1	0
3790	99.8	1.90	173	5	1	1	0
3791	119.3	1.90	172	6	2	0	0
3792	112.3	1.90	172	6	2	0	0
3793	143.5	1.99	178	4	3	1	0
3794	123.4	1.99	178	4	3	1	0
3795	134.4	2.01	188	3	1	1	0
3796	77.8	2.01	188	3	1	1	0
3797	77.8	2.01	188	3	1	1	0
3798	77.8	2.01	188	3	1	1	0
3799	77.8	2.01	188	3	1	1	0
3800	98.8	2.19	199	5	2	1	0
3801	98.8	2.19	199	5	2	1	0
3802	58	2.19	199	5	2	1	0
3803	82	2.04	188	5	2	0	0
3804	74.3	1.89	173	3	2	1	0
3805	78.8	2.03	183	5	2	1	0
3806	86.3	2.03	183	5	2	1	0
3807	68.6	1.85	165	5	2	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3808	66.1	1.95	168	7	3	1	0
3809	73.6	1.91	164	7	3	1	0
3810	116.2	1.91	164	7	3	1	0
3811	99.2	1.83	163	5	2	1	0
3812	114.1	1.83	163	5	2	1	0
3813	106.6	1.82	169	3	1	1	0
3814	100.2	1.78	169	3	1	0	0
3815	135.3	1.83	168	4	1	1	0
3816	116.9	1.93	168	6	3	1	0
3817	120.6	1.98	175	5	3	1	0
3818	89.7	1.97	172	6	3	1	0
3819	100.9	1.95	170	6	3	1	0
3820	150.3	1.92	167	6	3	1	0
3821	92.7	1.81	161	5	2	1	0
3822	103.4	1.88	168	5	2	1	0
3823	106.9	2.24	197	7	3	1	0
3824	84.4	2.67	233	9	4	1	0
3825	73.6	2.00	173	7	3	1	0
3826	55	2.03	174	8	3	1	0
3827	106.7	1.58	133	6	3	1	0
3828	85.1	1.46	130	3	2	1	0
3829	110	1.46	130	3	2	1	0
3830	80.8	1.46	130	3	2	1	0
3831	125.6	3.44	289	16	5	2	0
3832	123	1.54	118	8	4	2	0
3833	167.8	2.80	233	12	5	2	0
3834	129.2	3.05	243	17	8	1	0
3835	239.9	3.05	243	17	8	1	0
3836	115.4	2.98	245	15	5	2	0
3837	87.7	2.87	244	14	5	0	0
3838	82.3	2.93	246	16	5	0	0
3839	82.9	2.90	245	15	5	0	0
3840	76.8	2.90	245	15	5	0	0
3841	99.5	2.05	168	10	3	2	0
3842	87.3	1.99	159	11	2	3	0
3843	62.4	1.81	154	9	3	0	0
3844	76.4	1.81	154	9	3	0	0
3845	87.4	1.80	153	9	3	0	0
3846	86.6	1.95	159	11	2	2	0
3847	74.3	2.04	168	11	2	2	0
3848	48.6	3.22	268	17	4	2	0
3849	142.7	3.78	316	21	4	2	0
3850	118.2	3.45	288	20	3	2	0
3851	176.4	3.45	288	20	3	2	0
3852	145.4	3.31	276	19	3	2	0
3853	184.3	2.95	242	18	3	2	0
3854	190.5	2.95	242	18	3	2	0
3855	160.2	2.88	237	17	3	2	0
3856	145.6	2.68	223	14	3	2	0
3857	177.8	2.68	223	14	3	2	0
3858	157.9	2.58	217	14	3	1	0
3859	136.5	2.51	213	14	2	1	0
3860	132.3	2.49	211	14	2	1	0
3861	125.3	2.49	208	14	3	1	0
3862	140.6	2.44	205	13	3	1	0
3863	146.9	2.42	203	13	3	1	0
3864	146.9	2.42	203	13	3	1	0
3865	146.9	2.42	203	13	3	1	0
3866	86.4	2.62	219	13	3	2	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3867	101.5	2.48	209	10	5	1	0
3868	139.5	2.39	202	8	7	0	0
3869	130.2	2.35	202	9	5	0	0
3870	102.6	2.51	203	11	6	2	0
3871	109.1	2.03	173	10	2	1	0
3872	101	1.90	159	9	3	1	0
3873	90.5	1.92	162	8	2	2	0
3874	104.8	1.92	164	7	2	2	0
3875	94.9	1.92	160	7	2	3	0
3876	104.9	1.84	156	7	2	2	0
3877	96.6	1.71	142	8	3	1	0
3878	85.6	1.55	133	6	2	1	0
3879	94.7	1.55	133	6	2	1	0
3880	82.1	1.66	140	6	2	2	0
3881	108.7	1.66	140	6	2	2	0
3882	107.8	1.43	122	7	1	1	0
3883	117.4	1.40	121	6	1	1	0
3884	107.9	1.39	119	5	2	1	0
3885	140	1.39	119	5	2	1	0
3886	74.1	1.36	119	5	1	1	0
3887	119.3	1.42	125	5	1	1	0
3888	89.7	1.45	128	5	1	1	0
3889	132.9	1.04	84	3	2	2	0
3890	132.9	1.04	84	3	2	2	0
3891	132.9	1.04	84	3	2	2	0
3892	132.9	1.04	84	3	2	2	0
3893	92.5	1.04	84	3	2	2	0
3894	96.8	0.97	85	3	2	0	0
3895	79.3	1.17	98	5	3	0	0
3896	78.8	1.15	95	5	2	1	0
3897	99	1.11	92	4	1	2	0
3898	79.9	1.11	90	5	1	2	0
3899	117	1.13	89	5	2	2	0
3900	101.7	1.19	98	5	1	2	0
3901	130.4	1.19	98	5	1	2	0
3902	133	1.23	99	7	2	1	0
3903	109.8	1.23	99	7	2	1	0
3904	88.7	1.30	105	7	1	2	0
3905	108	1.26	107	6	1	1	0
3906	95.9	1.28	111	5	1	1	0
3907	115.7	1.34	108	4	2	3	0
3908	86.1	1.33	107	4	2	3	0
3909	100.2	1.29	101	5	2	3	0
3910	78.7	1.15	94	4	3	1	0
3911	135.3	1.10	89	4	3	1	0
3912	114.8	1.12	87	4	3	2	0
3913	107.4	1.09	95	4	2	0	0
3914	69.5	1.09	95	4	2	0	0
3915	92.8	1.32	115	5	1	1	0
3916	88.2	1.37	117	5	2	1	0
3917	130.5	1.40	120	5	2	1	0
3918	100.3	1.37	119	4	2	1	0
3919	97.7	1.37	119	4	2	1	0
3920	136.9	1.63	145	4	2	1	0
3921	119	2.14	198	3	2	1	0
3922	105.2	2.14	188	5	4	1	0
3923	96.3	1.35	109	5	4	1	0
3924	125.3	1.40	110	5	4	2	0
3925	82.2	1.37	107	5	4	2	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3926	94.3	1.96	150	10	6	2	0
3927	97.9	1.92	150	10	6	1	0
3928	119.7	1.92	150	10	6	1	0
3929	70	0.85	63	6	2	1	0
3930	75.2	1.13	92	4	3	1	0
3931	52.4	1.09	92	4	3	0	0
3932	80.6	1.14	92	6	2	1	0
3933	89.6	1.49	128	4	3	1	0
3934	86.8	1.49	128	4	3	1	0
3935	92.1	1.10	96	4	2	0	0
3936	75.8	1.02	83	5	3	0	0
3937	104.1	0.98	82	3	2	1	0
3938	75.2	0.98	82	3	2	1	0
3939	76.6	1.06	90	5	2	0	0
3940	60.3	1.12	92	3	2	2	0
3941	68.2	1.48	129	3	3	1	0
3942	52.6	1.48	129	3	3	1	0
3943	53.4	1.48	129	3	3	1	0
3944	41	1.48	129	3	3	1	0
3945	38.6	1.48	129	3	3	1	0
3946	36.1	1.48	129	3	3	1	0
3947	48	0.94	87	2	1	0	0
3948	50.9	1.23	103	5	2	1	0
3949	28.9	0.96	85	2	1	1	0
3950	34.8	0.74	60	4	2	0	0
3951	47.8	0.73	63	2	2	0	0
3952	43.1	0.77	65	3	2	0	0
3953	51.2	0.83	67	5	2	0	0
3954	49.1	0.86	67	5	3	0	0
3955	51	0.86	67	5	3	0	0
3956	49.1	0.86	67	5	3	0	0
3957	49.1	0.69	59	2	2	0	0
3958	52	0.66	59	2	1	0	0
3959	49.1	0.66	59	2	1	0	0
3960	40.6	0.76	67	3	1	0	0
3961	46.8	0.77	62	3	3	0	0
3962	47.3	0.89	75	4	2	0	0
3963	42.4	0.89	75	4	2	0	0
3964	50.8	0.89	75	4	2	0	0
3965	46.9	0.88	74	4	2	0	0
3966	67.3	0.88	74	4	2	0	0
3967	82.1	0.96	80	5	2	0	0
3968	73.9	0.92	78	4	2	0	0
3969	53	1.01	89	3	2	0	0
3970	47.4	1.10	96	4	2	0	0
3971	45.1	1.06	90	5	2	0	0
3972	62.1	1.09	90	5	3	0	0
3973	86.8	1.09	90	5	3	0	0
3974	74.8	0.95	95	0	0	0	0
3975	85.8	0.95	83	3	2	0	0
3976	80.6	0.96	82	4	2	0	0
3977	82.2	0.98	82	5	2	0	0
3978	56.5	0.87	83	2	0	0	0
3979	96	0.98	87	4	1	0	0
3980	93.5	1.05	89	5	2	0	0
3981	79	1.18	99	5	3	0	0
3982	129.3	1.18	99	5	3	0	0
3983	94.1	1.19	107	3	2	0	0
3984	103.1	1.19	107	3	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3985	125.1	1.16	97	5	3	0	0
3986	80.7	1.17	103	4	2	0	0
3987	79.5	1.17	103	4	2	0	0
3988	90.2	1.14	100	4	2	0	0
3989	76.3	1.20	103	4	3	0	0
3990	90.9	1.20	103	4	3	0	0
3991	60.9	1.11	99	3	2	0	0
3992	81.3	1.11	99	3	2	0	0
3993	87.3	1.09	97	3	2	0	0
3994	61	0.99	92	2	1	0	0
3995	84.5	1.04	87	4	3	0	0
3996	86	1.09	90	5	3	0	0
3997	64.5	1.09	90	5	3	0	0
3998	64.7	1.01	87	4	2	0	0
3999	71.3	1.14	95	5	3	0	0
4000	75.2	1.18	95	5	3	1	0
4001	64.3	1.17	96	4	3	1	0
4002	93.1	1.17	96	4	3	1	0
4003	81.2	1.12	94	6	2	0	0
4004	108.6	1.06	90	5	2	0	0
4005	65.1	0.93	81	3	2	0	0
4006	96.9	0.95	88	2	1	0	0
4007	60.7	0.99	89	2	2	0	0
4008	68.7	1.04	91	2	3	0	0
4009	73.7	0.99	89	2	2	0	0
4010	122.7	1.04	92	3	2	0	0
4011	82.6	1.05	93	3	2	0	0
4012	93.3	1.15	96	5	3	0	0
4013	80.8	1.18	99	5	3	0	0
4014	76	1.35	116	6	1	1	0
4015	86	1.33	120	5	1	0	0
4016	96.8	1.10	99	4	1	0	0
4017	74.7	1.09	98	4	1	0	0
4018	72.9	1.11	97	4	2	0	0
4019	72.6	1.09	93	5	2	0	0
4020	48.1	1.07	95	3	2	0	0
4021	50.7	1.24	99	4	3	2	0
4022	68	1.37	110	5	3	2	0
4023	55.5	1.37	110	5	3	2	0
4024	66	0.54	41	3	1	1	0
4025	69.6	0.63	50	3	1	1	0
4026	74.7	0.47	40	2	1	0	0
4027	89.7	0.46	36.9	2.2	1.5	0	0
4028	46.5	0.69	51.3	4.6	1.5	1.1	0
4029	47.2	0.71	55.7	3.1	0.9	1.7	0
4030	25	0.90	71.8	2.5	1.2	2.4	0
4031	142.8	0.93	75.4	1.9	1.2	2.6	0
4032	79.3	0.93	74.8	2.9	1.2	2.1	0
4033	117.4	0.93	74.6	3.5	1.2	1.9	0
4034	39.2	1.63	139.5	4.2	2.1	2.3	0
4035	57.5	1.95	171.6	5	1.9	2	0
4036	124.3	4.64	427	11.1	3.6	1	0
4037	65.8	5.49	506.8	13.1	4.2	0.8	0
4038	142.1	3.72	328.8	9.9	4.7	2.2	0
4039	104	3.12	269.5	8.8	4.8	2.6	0
4040	108.7	4.07	360.2	9.7	3.8	4.1	0
4041	156.4	5.09	472	10	3	2	0
4042	158.8	6.86	646	10	4	2	0
4043	134.7	7.30	690	10	4	2	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4044	106.7	7.30	690	10	4	2	0
4045	87.2	5.76	538	12	2	2	0
4046	57.8	5.23	472	17	3	2	0
4047	19.9	4.66	419	15	3	2	0
4048	56.1	4.09	366	13	3	2	0
4049	20.9	3.55	313	11	4	2	0
4050	21	2.99	261	9	4	2	0
4051	22	2.42	208	7	4	2	0
4052	23	1.87	155	6	4	2	0
4053	87.4	1.31	103	4	4	2	0
4054	17.1	1.83	152	7	3	2	0
4055	57.9	1.83	152	7	3	2	0
4056	57.9	1.78	151	5	3	2	0
4057	50.6	2.09	176	8	3	2	0
4058	72.9	2.09	176	8	3	2	0
4059	75.1	2.00	160	10	4	2	0
4060	112.3	2.00	160	10	4	2	0
4061	141.9	1.89	157	10	4	0	0
4062	83.3	1.89	157	10	4	0	0
4063	92	2.00	167	8	3	2	0
4064	85.7	2.39	188	12	5	3	0
4065	95.8	2.39	188	12	5	3	0
4066	126	2.32	188	12	4	2	0
4067	132.7	2.26	189	12	3	1	0
4068	150	2.27	190	12	3	1	0
4069	85.6	2.27	190	12	3	1	0
4070	76.9	1.99	172	5	3	2	0
4071	84.6	1.99	172	5	3	2	0
4072	108.4	2.39	199	13	2	2	0
4073	85.4	2.39	199	13	2	2	0
4074	100.2	2.32	195	9	5	1	0
4075	70.8	1.46	120	7	4	0	0
4076	74.2	2.09	172	7	5	2	0
4077	79.6	2.08	180	8	4	0	0
4078	72.1	2.08	180	8	4	0	0
4079	84.6	2.09	178	7	3	2	0
4080	93.4	2.12	181	9	3	1	0
4081	101.5	2.17	183	9	4	1	0
4082	79.2	2.27	202	8	3	0	0
4083	93.6	2.76	245	9	3	1	0
4084	83.6	2.76	245	9	3	1	0
4085	71.5	2.96	261	13	3	0	0
4086	52.2	2.96	261	13	3	0	0
4087	67.5	2.96	270	10	2	0	0
4088	63.2	2.96	270	10	2	0	0
4089	48	1.82	143	8	5	2	0
4090	61.9	1.67	137	5	4	2	0
4091	55.3	1.51	132	5	3	0	0
4092	47.6	1.47	128	5	3	0	0
4093	56.7	1.42	121	6	3	0	0
4094	45.3	1.21	98	5	3	1	0
4095	58.5	1.47	128	5	3	0	0
4096	65.3	1.70	132	7	4	3	0
4097	87.6	1.64	126	7	4	3	0
4098	82.6	1.44	117	5	3	2	0
4099	64.8	1.32	113	3	3	1	0
4100	70.2	1.30	111	3	3	1	0
4101	67.1	1.30	115	3	3	0	0
4102	64.5	1.43	115	5	2	3	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4103	56.7	1.36	116	5	2	1	0
4104	73.8	1.50	122	7	2	2	0
4105	67.9	1.53	122	7	3	2	0
4106	68	1.39	114	6	3	1	0
4107	68.6	1.22	100	4	2	2	0
4108	65.6	1.23	101	4	2	2	0
4109	75.6	1.29	103	4	2	3	0
4110	76.5	1.09	83	4	2	3	0
4111	82.5	1.14	94	5	2	1	0
4112	65.3	1.15	99	5	2	0	0
4113	58.9	1.17	96	4	3	1	0
4114	71.5	1.18	94	5	2	2	0
4115	56.4	1.20	96	3	2	3	0
4116	73.6	1.18	96	4	2	2	0
4117	68.8	1.17	94	5	3	1	0
4118	62.7	0.84	63	4	3	1	0
4119	35	0.84	63	4	3	1	0
4120	118.8	0.78	64	4	2	0	0
4121	76	0.78	64	4	2	0	0
4122	94.1	0.85	68	5	1	1	0
4123	84.2	0.86	71	4	1	1	0
4124	99.1	0.90	72	4	2	1	0
4125	93.4	0.90	69	4	3	1	0
4126	95.5	0.96	75	4	3	1	0
4127	84.4	1.00	80	5	2	1	0
4128	82.6	0.99	75	5	2	2	0
4129	77.6	1.01	77	5	2	2	0
4130	80.2	0.94	70	5	2	2	0
4131	65.9	0.85	61	5	2	2	0
4132	73.1	0.92	61	5	3	3	0
4133	42.9	0.95	61	5	4	3	0
4134	77.4	0.88	61	5	3	2	0
4135	67.4	0.83	60	5	3	1	0
4136	53.2	0.75	59	5	2	0	0
4137	71	0.88	57	5	3	3	0
4138	72.7	0.88	57	5	3	3	0
4139	63.8	0.84	60	5	2	2	0
4140	85.9	0.87	63	5	2	2	0
4141	67.2	1.00	71	5	1	4	0
4142	69.8	1.04	74	4	2	4	0
4143	75	0.97	66	5	3	3	0
4144	81.5	0.92	62	5	4	2	0
4145	75.4	0.91	63	5	2	3	0
4146	63.6	0.82	60	4	2	2	0
4147	74.9	0.75	50	4	3	2	0
4148	78.5	0.75	54	4	3	1	0
4149	86.7	0.84	59	4	3	2	0
4150	80.5	0.87	59	5	2	3	0
4151	85.5	0.94	64	4	2	4	0
4152	77.4	0.95	66	4	3	3	0
4153	75.5	0.98	67	5	3	3	0
4154	83.6	0.81	63	4	2	1	0
4155	81.2	0.73	59	4	2	0	0
4156	64.7	0.76	59	4	3	0	0
4157	69.6	0.76	59	4	3	0	0
4158	89.1	0.71	54	4	3	0	0
4159	90	0.65	51	4	2	0	0
4160	76	0.81	59	4	2	2	0
4161	108.4	0.77	58	5	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4162	86.4	0.80	58	5	4	0	0
4163	61.2	0.76	49	5	3	2	0
4164	56.8	0.79	51	5	2	3	0
4165	75.5	0.79	54	5	1	3	0
4166	62.8	0.83	60	5	3	1	0
4167	68.9	0.85	59	5	4	1	0
4168	69.9	0.86	58	3	2	4	0
4169	64.5	0.78	57	3	1	3	0
4170	83	0.81	57	3	2	3	0
4171	71.6	0.83	56	5	3	2	0
4172	42.1	0.76	55	4	3	1	0
4173	61.2	0.87	63	5	2	2	0
4174	71.2	0.82	58	5	2	2	0
4175	77.2	0.78	55	4	1	3	0
4176	104	0.74	51	4	1	3	0
4177	69.2	0.70	47	4	1	3	0
4178	74.1	0.80	51	4	3	3	0
4179	81.2	0.74	49	4	3	2	0
4180	121.5	0.74	49	4	3	2	0
4181	72.5	0.82	57	4	3	2	0
4182	74.2	0.74	54	3	2	2	0
4183	72.1	0.70	56	4	2	0	0
4184	66.5	0.64	50	4	2	0	0
4185	75.6	0.64	50	4	2	0	0
4186	145.8	0.72	56	3	2	1	0
4187	79.1	0.70	54	3	2	1	0
4188	75.6	0.76	50	4	2	3	0
4189	67.4	0.68	52	3	2	1	0
4190	74.8	0.69	51	4	2	1	0
4191	78.2	0.72	50	4	2	2	0
4192	53.1	0.76	50	4	2	3	0
4193	79.3	0.65	47	4	2	1	0
4194	75.5	0.60	46	4	2	0	0
4195	66.8	0.72	51	5	1	2	0
4196	52.3	0.51	34	3	1	2	0
4197	57.3	0.58	45	3	1	1	0
4198	83.1	0.67	48	4	1	2	0
4199	90.3	0.67	45	4	2	2	0
4200	92.1	0.69	47	4	2	2	0
4201	126.4	0.69	47	4	2	2	0
4202	66.2	0.80	48	4	4	3	0
4203	87.5	0.78	47	5	3	3	0
4204	68.4	0.69	49	5	2	1	0
4205	81.1	0.73	45	5	2	3	0
4206	77.6	0.63	40	5	3	1	0
4207	63.2	0.61	45	3	2	1	0
4208	93.6	0.58	40	4	2	1	0
4209	103.5	0.54	40	4	2	0	0
4210	51.9	0.57	41	5	2	0	0
4211	67.4	0.58	42	5	2	0	0
4212	72.2	0.53	39	4	2	0	0
4213	21.6	0.52	40	3	2	0	0
4214	83.9	0.63	44	5	3	0	0
4215	70.5	0.55	30	4	3	2	0
4216	67.2	0.69	47	4	2	2	0
4217	68.7	0.95	67	4	4	2	0
4218	67.5	0.89	67	4	2	2	0
4219	70.7	0.70	57	3	1	1	0
4220	77.2	0.69	56	3	1	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4221	89.6	0.72	55	3	1	2	0
4222	93.1	0.66	51	2	1	2	0
4223	22.7	0.44	19	2	3	3	0
4224	52.1	0.36	26	2	2	0	0
4225	63.3	0.32	23	3	1	0	0
4226	34.5	0.49	25	3	2	3	0
4227	52.5	0.53	27	2	2	4	0
4228	52.2	0.52	33	2	5	0	0
4229	54.2	0.57	37	1	2	3	0
4230	62.9	0.69	47	2	2	3	0
4231	47.7	0.76	56	3	2	2	0
4232	48.2	0.76	56	3	2	2	0
4233	51.8	0.79	51	3	2	4	0
4234	53.2	0.77	47	4	2	4	0
4235	77	0.65	51	4	2	0	0
4236	49.2	0.70	54	3	2	1	0
4237	54.1	0.57	51	3	0	0	0
4238	74	0.52	37	2	1	2	0
4239	67.5	0.60	38	2	2	3	0
4240	58	0.52	43	3	1	0	0
4241	3.3	0.75	49	3	4	2	0
4242	7.8	0.59	37	2	2	3	0
4243	108.9	0.48	33	3	3	0	0
4244	125	0.50	33	2	3	1	0
4245	87.7	0.53	34	1	3	2	0
4246	108.1	0.32	25	2	1	0	0
4247	118.2	0.32	25	2	1	0	0
4248	110.1	0.32	25	2	1	0	0
4249	110.8	0.41	25	1	2	2	0
4250	113	0.41	25	1	2	2	0
4251	74.8	0.50	28	2	2	3	0
4252	120.2	0.50	28	2	2	3	0
4253	115.5	0.56	29	2	1	5	0
4254	116.1	0.58	32	4	2	3	0
4255	72.4	0.58	32	4	2	3	0
4256	149.4	0.57	45	3	2	0	0
4257	117.8	0.57	45	3	2	0	0
4258	108.6	0.56	37	2	1	3	0
4259	109.6	0.54	36	2	2	2	0
4260	16.1	0.54	36	2	2	2	0
4261	135.7	0.38	30	1	2	0	0
4262	152.4	0.38	30	1	2	0	0
4263	154.8	0.38	30	1	2	0	0
4264	117.4	0.61	34	3	3	3	0
4265	154.6	0.61	34	3	3	3	0
4266	148.1	0.58	35	3	3	2	0
4267	136.4	0.46	36	2	2	0	0
4268	150.3	0.46	36	2	2	0	0
4269	103.1	0.55	33	2	2	3	0
4270	85.6	0.55	33	2	2	3	0
4271	144.9	0.61	39	2	2	3	0
4272	113.7	0.59	41	2	2	2	0
4273	132.2	0.59	47	1	2	1	0
4274	124.2	0.66	49	2	3	1	0
4275	144.3	0.68	47	2	3	2	0
4276	110.2	0.69	48	2	3	2	0
4277	143.5	0.66	51	2	1	2	0
4278	119	0.66	51	2	1	2	0
4279	119.9	0.68	54	2	2	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4280	100.6	0.68	55	2	3	0	0
4281	130.4	0.67	49	2	2	2	0
4282	104.6	0.67	49	2	2	2	0
4283	141.6	0.70	48	2	2	3	0
4284	138.1	0.73	47	2	2	4	0
4285	161.6	0.63	41	2	2	3	0
4286	129.9	0.39	24	2	1	2	0
4287	113.5	0.42	27	2	1	2	0
4288	138.6	0.61	37	3	2	3	0
4289	122.7	0.69	42	3	3	3	0
4290	132.6	0.66	43	3	3	2	0
4291	79.5	0.61	43	2	2	2	0
4292	102.7	0.66	48	4	2	1	0
4293	100.1	0.65	49	3	2	1	0
4294	119.9	0.64	51	3	1	1	0
4295	118.1	0.64	51	3	1	1	0
4296	155	0.61	42	4	1	2	0
4297	81.3	0.65	39	4	2	3	0
4298	146.1	0.60	41	4	1	2	0
4299	108.7	0.60	41	4	1	2	0
4300	120.9	0.55	40	4	1	1	0
4301	144.4	0.55	41	4	2	0	0
4302	96.6	0.63	41	4	2	2	0
4303	144.2	0.66	40	4	2	3	0
4304	108.5	0.62	41	3	1	3	0
4305	110.2	0.63	42	3	1	3	0
4306	53.6	1.00	76	3	2	3	0
4307	29.5	0.71	47	3	2	3	0
4308	48.2	0.42	31	2	1	1	0
4309	36.7	0.42	31	2	1	1	0
4310	103.9	0.42	31	2	1	1	0
4311	131.5	0.55	33	4	2	2	0
4312	118.6	0.55	33	4	2	2	0
4313	150.8	0.39	28	4	1	0	0
4314	97.8	0.39	28	4	1	0	0
4315	97.2	0.74	48	4	2	3	0
4316	105.2	0.74	48	4	2	3	0
4317	78	0.67	51	3	2	1	0
4318	88.8	0.60	38	4	2	2	0
4319	61.6	0.43	20	4	1	3	0
4320	42.6	0.43	20	4	1	3	0
4321	32.4	0.50	22	5	2	3	0
4322	51.3	0.41	23	4	2	1	0
4323	49.8	0.42	27	4	1	1	0
4324	48.3	0.65	43	4	2	2	0
4325	41.5	0.56	34	4	2	2	0
4326	62.2	0.57	38	4	1	2	0
4327	61.3	0.61	39	4	2	2	0
4328	82.3	0.61	39	4	2	2	0
4329	73.5	0.56	37	4	1	2	0
4330	77.6	0.56	37	4	1	2	0
4331	63.4	0.44	30	4	2	0	0
4332	55.4	0.61	34	5	3	2	0
4333	42.2	0.59	34	4	3	2	0
4334	55.2	0.62	33	2	3	4	0
4335	60.9	0.56	32	5	2	2	0
4336	59.4	0.55	33	4	2	2	0
4337	63.2	0.59	35	3	2	3	0
4338	56.2	0.59	35	3	2	3	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4339	35	0.62	34	4	4	2	0
4340	99.8	0.52	30	4	2	2	0
4341	73.1	0.53	26	4	1	4	0
4342	86.4	0.53	26	4	1	4	0
4343	134.3	0.61	30	5	3	3	0
4344	157.5	0.61	30	5	3	3	0
4345	162	0.62	31	5	3	3	0
4346	162.5	0.54	34	5	2	1	0
4347	112.2	0.54	34	5	2	1	0
4348	128.6	0.50	34	3	2	1	0
4349	203.4	0.29	23	3	0	0	0
4350	159.1	0.29	23	3	0	0	0
4351	164.1	0.40	12	5	2	3	0
4352	177.3	0.40	12	5	2	3	0
4353	152.4	0.40	12	5	2	3	0
4354	163.5	0.43	18	5	1	3	0
4355	157.8	0.43	18	5	1	3	0
4356	144.8	0.38	19	4	1	2	0
4357	86.5	0.39	24	4	1	1	0
4358	100.6	0.63	33	4	2	4	0
4359	164.9	0.63	33	4	2	4	0
4360	157.1	0.64	34	4	2	4	0
4361	187	0.61	37	5	2	2	0
4362	121.3	0.60	40	5	2	1	0
4363	87.3	0.60	40	5	2	1	0
4364	102	0.80	57	5	3	1	0
4365	129.6	0.73	53	5	2	1	0
4366	157.8	0.65	47	4	2	1	0
4367	183.1	0.65	47	4	2	1	0
4368	175	0.79	56	4	1	3	0
4369	190.2	0.82	59	4	1	3	0
4370	234.2	0.84	59	5	1	3	0
4371	130.5	0.90	61	5	1	4	0
4372	159.7	0.92	63	5	1	4	0
4373	199.8	0.84	65	4	1	2	0
4374	141	0.78	67	4	1	0	0
4375	174.8	0.78	67	4	1	0	0
4376	188.8	0.76	61	4	1	1	0
4377	165.1	0.76	57	4	1	2	0
4378	233.2	0.77	55	4	2	2	0
4379	229.4	0.79	55	5	2	2	0
4380	229.8	0.79	55	5	2	2	0
4381	178.9	0.79	55	5	2	2	0
4382	237.9	0.65	48	3	1	2	0
4383	162.3	0.65	48	3	1	2	0
4384	167	0.63	47	3	2	1	0
4385	237.1	0.63	47	3	2	1	0
4386	143.3	0.82	51	5	3	3	0
4387	129.1	0.70	50	3	2	2	0
4388	165.6	0.59	45	4	2	0	0
4389	141.5	0.58	44	4	2	0	0
4390	236.4	0.56	42	4	2	0	0
4391	143.9	0.68	42	4	2	3	0
4392	127	0.62	40	4	2	2	0
4393	105.9	0.67	45	4	2	2	0
4394	129.4	0.71	45	4	2	3	0
4395	139.1	0.69	41	5	2	3	0
4396	153.3	0.68	40	5	2	3	0
4397	122.3	0.70	39	5	3	3	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4398	86.3	0.65	38	5	3	2	0
4399	113.2	0.63	44	5	3	0	0
4400	118.3	0.67	48	5	3	0	0
4401	161	0.71	51	5	2	1	0
4402	128.7	0.71	51	5	2	1	0
4403	50	0.74	59.3	4.6	0.6	0.8	0
4404	32	1.76	150.8	6.5	2.3	1.4	0
4405	47.5	1.75	154	5.5	2.1	0.9	0
4406	43.3	1.41	113.1	4.6	2.7	2.6	0
4407	84.9	0.92	68.4	3.2	2.4	2.6	0
4408	63.8	0.57	36.1	3.1	1.8	2.3	0
4409	70.1	0.54	35.3	3.7	1.8	1.5	0
4410	84.9	0.49	33.7	5	1.8	0	0
4411	98.1	0.55	34	4	3	1	0
4412	69	0.49	24	3	1	4	0
4413	68.3	0.42	25	3	1	2	0
4414	80.6	0.46	23	4	1	3	0
4415	85.1	0.56	33	2	1	4	0
4416	66.7	0.49	37	1	2	1	0
4417	61.9	0.49	37	1	2	1	0
4418	61.4	0.63	38	4	3	2	0
4419	112.4	0.60	38	4	2	2	0
4420	132.1	0.60	38	4	2	2	0
4421	99	0.52	30	4	2	2	0
4422	109.1	0.51	29	4	2	2	0
4423	77.9	0.48	26	4	2	2	0
4424	57.8	0.42	20	4	2	2	0
4425	80.8	0.33	21	3	2	0	0
4426	108.4	0.44	28	3	2	1	0
4427	64.9	0.44	26	4	2	1	0
4428	109.5	0.47	23	5	2	2	0
4429	97.4	0.51	29	4	2	2	0
4430	117.4	0.56	34	4	2	2	0
4431	104.3	0.56	34	4	2	2	0
4432	116	0.56	34	4	2	2	0
4433	97.3	0.56	34	4	2	2	0
4434	90.7	0.56	34	4	2	2	0
4435	75.9	0.53	30	3	3	2	0
4436	70.1	0.70	43	5	3	2	0
4437	82.1	0.92	56	6	4	3	0
4438	120.6	0.87	56	7	3	2	0
4439	74.8	0.95	65	8	2	2	0
4440	77.5	0.98	68	8	2	2	0
4441	87.9	1.06	72	7	4	2	0
4442	117.6	1.00	67	8	3	2	0
4443	84.8	0.97	67	8	2	2	0
4444	66.6	0.89	63	6	2	2	0
4445	12.2	0.75	53	6	2	1	0
4446	45.4	0.66	51	4	1	1	0
4447	59.6	0.73	51	4	2	2	0
4448	33.4	0.70	50	3	2	2	0
4449	29.7	0.73	60	3	1	1	0
4450	34.5	0.74	55	3	3	1	0
4451	58.4	0.74	55	3	3	1	0
4452	67.4	0.70	54	3	2	1	0
4453	67.5	0.54	48	3	0	0	0
4454	74.7	0.73	56	2	3	1	0
4455	45.5	0.73	56	2	3	1	0
4456	73.6	0.71	52	3	3	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4457	64.9	0.81	58	3	3	2	0
4458	65.4	0.75	57	2	2	2	0
4459	63.7	0.75	57	2	2	2	0
4460	62.1	0.75	57	2	2	2	0
4461	38.3	0.73	57	3	2	1	0
4462	42.5	0.85	55	5	4	2	0
4463	42.5	0.85	55	5	4	2	0
4464	21.9	0.82	62	3	2	2	0
4465	53.3	0.78	61	7	1	0	0
4466	19.2	0.90	68	6	2	1	0
4467	25.9	1.13	82	7	3	2	0
4468	32	0.96	70	6	2	2	0
4469	31.6	1.01	68	8	3	2	0
4470	48.5	0.88	61	7	3	1	0
4471	54.3	0.64	40	5	2	2	0
4472	50.5	0.64	42	6	2	1	0
4473	76.1	0.63	44	3	3	1	0
4474	81.2	0.66	45	4	3	1	0
4475	75.9	0.68	48	5	2	1	0
4476	47.5	0.68	48	5	2	1	0
4477	58.9	0.41	25	3	2	1	0
4478	62	0.54	31	5	3	1	0
4479	75.9	0.57	37	5	2	1	0
4480	76.6	0.73	48	6	3	1	0
4481	60	0.78	53	6	3	1	0
4482	77.9	0.69	40	4	3	3	0
4483	76.2	0.71	42	4	3	3	0
4484	82.8	0.57	40	3	1	2	0
4485	132.7	0.64	49	4	1	1	0
4486	78.6	0.72	52	5	2	1	0
4487	115.5	0.85	60	6	3	1	0
4488	85.4	0.87	62	6	3	1	0
4489	124	0.88	63	6	3	1	0
4490	151.1	0.89	64	6	3	1	0
4491	69.7	0.90	65	6	3	1	0
4492	79.1	0.89	59.8	6.1	1.3	3.2	0
4493	105.4	0.78	56.6	4.3	1.3	2.2	0
4494	135.4	0.70	55.3	3.1	1.5	1.1	0
4495	128.7	0.70	55.3	3.1	1.5	1.1	0
4496	105.5	0.49	35	2	2	1	0
4497	111.6	0.51	33	4	2	1	0
4498	0.1	0.52	34	4	2	1	0
4499	58.3	0.86	67	3	3	1	0
4500	49.9	0.83	64	3	3	1	0
4501	54.8	0.78	66	3	2	0	0
4502	62.5	0.72	62	2	2	0	0
4503	65.3	0.84	63	4	3	1	0
4504	64.8	0.85	69	5	2	0	0
4505	66.4	0.85	69	5	2	0	0
4506	47.3	0.85	69	5	2	0	0
4507	54	0.93	86	2	1	0	0
4508	56.7	0.92	76	5	2	0	0
4509	48.9	0.90	90	0	0	0	0
4510	43.8	1.12	98	2	2	1	0
4511	65.8	1.21	102	3	3	1	0
4512	90.9	1.43	115	5	2	3	0
4513	75.3	1.45	129	5	2	0	0
4514	61.3	1.50	133	4	3	0	0
4515	57.6	1.50	133	4	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4516	64.9	1.41	126	3	3	0	0
4517	52.3	1.34	118	5	2	0	0
4518	74.8	1.47	132	6	1	0	0
4519	105.1	1.31	119	3	2	0	0
4520	56.4	1.28	114	4	2	0	0
4521	42.6	1.27	115	3	2	0	0
4522	51.3	1.37	116	2	3	2	0
4523	54.6	1.39	115	5	2	2	0
4524	43	1.39	115	5	2	2	0
4525	56.6	1.21	107	4	2	0	0
4526	70.6	1.23	99	3	2	3	0
4527	50.6	1.21	97	3	2	3	0
4528	44.4	1.15	93	4	2	2	0
4529	44.3	1.15	93	4	2	2	0
4530	46.4	1.03	91	3	2	0	0
4531	59.3	0.92	73	4	1	2	0
4532	31.5	1.09	93	3	2	1	0
4533	39.6	1.13	87	2	2	4	0
4534	30	0.92	83	3	1	0	0
4535	30.4	0.84	75	3	1	0	0
4536	34.5	0.75	62	3	1	1	0
4537	50.2	0.91	69	3	4	1	0
4538	55.7	0.97	68	3	1	5	0
4539	46.5	0.86	66	3	2	2	0
4540	31.6	0.80	65	3	3	0	0
4541	29.9	0.87	59	3	2	4	0
4542	51.8	0.87	59	3	2	4	0
4543	40.8	0.79	58	5	1	2	0
4544	41	0.76	57	5	3	0	0
4545	41	0.77	65	1	2	1	0
4546	52.1	0.81	62	3	3	1	0
4547	70.2	0.74	59	4	1	1	0
4548	55.3	0.90	66	3	2	3	0
4549	48.9	0.89	66	5	3	1	0
4550	62.7	1.10	77	4	3	4	0
4551	48.3	0.95	80	3	3	0	0
4552	44.8	1.06	84	4	2	2	0
4553	54.1	1.14	82	4	4	3	0
4554	47.1	0.92	74	4	2	1	0
4555	25.2	1.10	81	4	3	3	0
4556	49.1	1.00	78	4	2	2	0
4557	61.2	0.93	73	5	2	1	0
4558	61.1	0.93	73	5	2	1	0
4559	45.3	1.06	79	7	3	1	0
4560	54.9	0.97	75	4	2	2	0
4561	54	1.08	83	7	1	2	0
4562	61.8	1.08	83	7	1	2	0
4563	46.2	1.06	87	5	3	0	0
4564	50.8	1.14	91	7	3	0	0
4565	26.7	1.05	81	7	2	1	0
4566	31.3	0.96	77	6	1	1	0
4567	49.3	1.08	72	6	4	3	0
4568	54.9	1.10	74	6	4	3	0
4569	48.4	1.10	74	6	4	3	0
4570	54.1	0.79	63	5	2	0	0
4571	85	0.84	64	5	2	1	0
4572	61.9	0.90	64	4	2	3	0
4573	82	0.87	62	6	3	1	0
4574	56.7	0.90	62	2	4	3	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4575	55.9	0.79	49	4	2	4	0
4576	47	0.79	54	4	3	2	0
4577	72.5	0.80	61	5	3	0	0
4578	75.7	0.94	71	4	1	3	0
4579	99.9	0.84	67	7	1	0	0
4580	51	0.85	69	5	2	0	0
4581	64	0.86	70	3	2	1	0
4582	41.6	0.76	60	3	2	1	0
4583	46.6	0.65	46	3	3	1	0
4584	49	0.66	42	4	4	1	0
4585	36.6	0.60	35	4	3	2	0
4586	32	0.36	20	3	2	1	0
4587	57.3	0.48	30	4	2	1	0
4588	33.7	0.51	33	4	2	1	0
4589	34.8	0.63	41	4	2	2	0
4590	36.8	0.89	55	7	4	2	0
4591	45.6	0.92	60	6	4	2	0
4592	0.7	1.00	73	5	3	2	0
4593	66.6	0.95	67	5	2	3	0
4594	78.1	0.66	53	5	1	0	0
4595	75.4	0.66	53	5	1	0	0
4596	83.9	0.67	53	4	2	0	0
4597	67.8	0.59	48	4	1	0	0
4598	61.3	0.55	46	3	1	0	0
4599	64.7	0.72	52	3	2	2	0
4600	44.7	0.50	38	6	0	0	0
4601	40.5	0.70	40	1	4	4	0
4602	39.8	0.63	39	3	2	3	0
4603	31	0.61	42	3	3	1	0
4604	31	0.69	42	4	1	4	0
4605	26.2	0.57	43	4	2	0	0
4606	25.5	0.65	47	4	2	1	0
4607	40.3	0.69	40	4	3	3	0
4608	35.9	0.64	40	3	2	3	0
4609	55.8	0.70	42	5	2	3	0
4610	60.9	0.68	42	4	2	3	0
4611	59.3	0.68	40	3	2	4	0
4612	48.5	0.51	38	3	1	1	0
4613	41.7	0.49	38	4	1	0	0
4614	34	0.73	43	3	4	3	0
4615	53.9	0.67	45	3	4	1	0
4616	64.9	0.51	39	3	2	0	0
4617	86.5	0.55	42	2	3	0	0
4618	33.6	0.69	48	5	1	2	0
4619	15.5	0.56	42	2	2	1	0
4620	41.9	0.64	38	4	2	3	0
4621	39.6	0.44	31	1	1	2	0
4622	51.9	0.61	37	3	2	3	0
4623	55.1	0.60	39	2	3	2	0
4624	49.8	0.78	42	4	4	4	0
4625	57.4	0.72	47	4	3	2	0
4626	48.4	0.75	50	4	3	2	0
4627	75.8	0.78	57	4	3	1	0
4628	39.4	1.02	63	7	3	4	0
4629	65.5	0.64	34	6	2	3	0
4630	78.8	1.06	68	7	4	3	0
4631	77.7	1.06	68	7	4	3	0
4632	53.8	1.10	65	6	7	3	0
4633	33.7	0.92	58	8	2	3	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4634	35.8	0.77	52	7	1	2	0
4635	65.8	0.72	46	6	2	2	0
4636	65	0.80	48	6	4	2	0
4637	52.9	0.76	55	6	3	0	0
4638	70.9	0.63	43	5	2	1	0
4639	45.5	0.62	51	4	1	0	0
4640	90.1	1.01	57	10	4	3	0
4641	60.1	0.88	57	5	3	3	0
4642	64.3	0.86	56	6	2	3	0
4643	63.4	0.95	50	7	5	4	0
4644	80.4	0.93	53	6	4	4	0
4645	94.4	0.94	59	7	3	3	0
4646	57.8	0.91	56	7	3	3	0
4647	60.5	0.66	50	5	2	0	0
4648	31.1	0.75	43	7	2	3	0
4649	45.7	0.87	42	8	3	5	0
4650	61.9	0.74	37	6	3	4	0
4651	85.9	0.61	33	5	2	3	0
4652	62.8	0.84	42	9	4	3	0
4653	48.2	0.82	44	5	4	4	0
4654	112.7	0.68	47	6	3	0	0
4655	53.3	0.68	47	6	3	0	0
4656	32.7	0.65	40	5	1	3	0
4657	35.2	0.47	35	3	2	0	0
4658	43.8	0.64	34	3	4	3	0
4659	30.2	0.55	36	4	1	2	0
4660	88.2	0.62	38	3	2	3	0
4661	67	0.68	32	4	4	4	0
4662	37.7	0.51	35	5	2	0	0
4663	76.5	0.65	42	5	3	1	0
4664	94.6	0.76	51	6	3	1	0
4665	110.9	0.75	55	7	2	0	0
4666	52.3	0.83	47	6	4	3	0
4667	44.8	0.77	45	6	4	2	0
4668	32.7	0.77	48	7	1	3	0
4669	43.4	0.72	39	7	5	1	0
4670	60.3	0.70	40	7	4	1	0
4671	74.7	0.74	43	7	3	2	0
4672	55.8	0.70	40	5	4	2	0
4673	77.7	0.57	35	4	2	2	0
4674	72.9	0.51	30	5	1	2	0
4675	112.7	0.61	34	5	3	2	0
4676	95.9	0.65	38	5	3	2	0
4677	69.4	0.54	30	5	2	2	0
4678	81.8	0.59	35	5	2	2	0
4679	78.3	0.74	47	5	3	2	0
4680	71.9	0.82	49	6	3	3	0
4681	131.3	0.75	46	4	3	3	0
4682	66.1	0.71	45	4	2	3	0
4683	75.8	0.68	45	5	3	1	0
4684	57.3	0.59	42	5	1	1	0
4685	1.2	0.57	27	6	2	3	0
4686	31.3	0.63	30	6	3	3	0
4687	45.1	0.67	34	6	3	3	0
4688	50.8	0.69	38	5	3	3	0
4689	72.9	0.88	58	6	2	3	0
4690	67.4	1.05	66	9	3	3	0
4691	69.8	1.06	67	8	5	2	0
4692	61.8	1.04	63	7	5	3	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4693	48.4	0.90	51	7	3	4	0
4694	60.6	0.82	46	7	2	4	0
4695	60.6	0.82	46	7	2	4	0
4696	54.2	0.82	46	7	2	4	0
4697	49.5	0.79	44	6	5	2	0
4698	54.2	0.79	45	5	4	3	0
4699	61.8	0.76	46	5	4	2	0
4700	65.1	0.75	46	6	3	2	0
4701	57.3	0.57	35	4	2	2	0
4702	92	0.61	37	5	2	2	0
4703	48.4	0.77	41	7	2	4	0
4704	35.3	0.62	39	4	1	3	0
4705	76.1	0.42	42	0	0	0	0
4706	33	0.79	48	4	5	2	0
4707	39.2	0.80	46	5	4	3	0
4708	66.9	0.79	47	4	4	3	0
4709	50.4	0.80	48	4	4	3	0
4710	50.6	0.82	44	7	4	3	0
4711	55.6	0.88	50	5	4	4	0
4712	44	0.78	49	4	3	3	0
4713	53.9	0.76	48	5	2	3	0
4714	55	0.64	49	4	1	1	0
4715	78	0.87	48	7	3	4	0
4716	57.1	0.82	45	6	3	4	0
4717	45.2	0.56	32	3	2	3	0
4718	58.3	0.62	35	5	3	2	0
4719	63.1	0.54	29	2	3	3	0
4720	60.7	0.77	37	4	4	5	0
4721	55.3	0.79	38	6	3	5	0
4722	64.5	0.69	34	5	3	4	0
4723	71.1	0.59	37	2	2	3	0
4724	68.9	0.64	38	4	2	3	0
4725	94.4	0.68	38	4	2	4	0
4726	75.8	0.69	39	4	2	4	0
4727	65.8	0.60	31	5	1	4	0
4728	62.4	0.55	26	5	1	4	0
4729	46.9	0.54	28	4	2	3	0
4730	42.1	0.52	25	3	3	3	0
4731	49.2	0.50	28	2	2	3	0
4732	43.5	0.62	36	2	2	4	0
4733	53	0.50	34	3	2	1	0
4734	43	0.54	36	4	2	1	0
4735	45	0.50	32	4	2	1	0
4736	36.6	0.50	29	2	3	2	0
4737	35.7	0.60	32	5	2	3	0
4738	49.4	0.51	32	2	1	3	0
4739	29.5	0.30	30	0	0	0	0
4740	17.7	0.28	28	0	0	0	0
4741	35.4	0.32	26	1	0	1	0
4742	34.7	0.50	30	3	2	2	0
4743	41.3	0.46	29	4	3	0	0
4744	42.7	0.47	28	3	3	1	0
4745	36.9	0.58	29	4	3	3	0
4746	40.1	0.50	26	3	2	3	0
4747	35.8	0.48	28	3	2	2	0
4748	43.6	0.56	28	3	2	4	0
4749	77.4	0.58	32	4	2	3	0
4750	61.3	0.52	24	3	2	4	0
4751	67.9	0.59	26	4	3	4	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4752	114.9	0.65	33	4	4	3	0
4753	87.3	0.56	35	4	3	1	0
4754	68.5	0.59	30	4	3	3	0
4755	70	0.56	28	5	2	3	0
4756	48	0.56	26	4	2	4	0
4757	70.8	0.42	37	1	1	0	0
4758	76	0.69	46	3	3	2	0
4759	109.9	0.80	49	5	3	3	0
4760	97.2	0.68	47	4	3	1	0
4761	57.1	0.63	45	4	2	1	0
4762	78.4	0.80	45	5	3	4	0
4763	125.6	0.82	51	5	3	3	0
4764	64	0.73	53	3	2	2	0
4765	99.4	0.67	41	4	2	3	0
4766	88.1	0.55	18	4	3	5	0
4767	76.4	0.61	37	3	2	3	0
4768	68.9	0.51	33	2	2	2	0
4769	76.9	0.59	36	3	3	2	0
4770	86.8	0.57	38	5	3	0	0
4771	93.3	0.74	45	4	3	3	0
4772	77.4	0.72	45	5	3	2	0
4773	87.9	0.67	40	5	3	2	0
4774	78	0.69	45	5	2	2	0
4775	130.2	0.75	48	5	3	2	0
4776	124.4	0.67	40	5	3	2	0
4777	68.8	0.68	43	4	3	2	0
4778	94	0.65	40	4	3	2	0
4779	52.1	0.63	41	4	2	2	0
4780	73.1	0.62	40	4	2	2	0
4781	56.5	0.64	39	4	3	2	0
4782	30	0.67	40	5	3	2	0
4783	59.1	0.68	41	5	3	2	0
4784	59.8	0.75	48	5	3	2	0
4785	58.6	0.77	50	5	3	2	0
4786	48.7	1.10	79.4	4.6	4.2	2.3	0
4787	69.4	1.06	75.9	4.4	4.1	2.3	0
4788	60	0.98	69	3.9	3.9	2.3	0
4789	57.3	1.00	72.2	4.6	3.6	2	0
4790	63.7	0.82	54	4.9	4.2	1.5	0
4791	63.4	0.71	46	4	3	2	0
4792	56.1	0.72	46	4	2	3	0
4793	61.1	0.63	41	4	2	2	0
4794	22.5	0.71	49	4	2	2	0
4795	33.7	0.70	41	4	3	3	0
4796	54.9	0.83	52	5	3	3	0
4797	62.4	0.88	52	4	4	4	0
4798	51.2	0.84	52	4	4	3	0
4799	48.9	0.69	52	5	1	1	0
4800	49.9	0.78	54	5	2	2	0
4801	64.4	0.77	51	6	2	2	0
4802	53.2	0.77	53	5	2	2	0
4803	47.6	0.81	61	3	2	2	0
4804	63.1	0.89	64	4	3	2	0
4805	59.7	0.93	68	4	3	2	0
4806	34	0.93	70	3	3	2	0
4807	61.2	0.89	66	7	3	0	0
4808	48.9	0.98	69	4	3	3	0
4809	101.9	1.31	98	5	5	2	0
4810	68.1	1.34	87	4	5	6	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4811	93.4	1.01	74	5	3	2	0
4812	73.9	0.86	68	6	2	0	0
4813	56.5	0.70	52	2	2	2	0
4814	103.6	0.80	67	2	3	0	0
4815	60.9	1.08	79	6	3	2	0
4816	84.6	1.08	79	6	3	2	0
4817	73.1	1.07	78	4	3	3	0
4818	74.2	1.10	82	5	2	3	0
4819	63.7	0.97	73	5	2	2	0
4820	48.1	0.95	75	5	2	1	0
4821	68.7	1.01	76	6	3	1	0
4822	68.4	1.02	77	6	3	1	0
4823	55.9	0.90	71	3	3	1	0
4824	56	0.99	72	5	3	2	0
4825	38.9	0.95	63	4	4	3	0
4826	50.3	0.93	62	5	3	3	0
4827	54.1	0.92	64	5	2	3	0
4828	67.4	0.88	59	4	3	3	0
4829	69.7	0.75	50	4	3	2	0
4830	87.7	0.76	46	5	4	2	0
4831	84.6	1.26	95	4	5	2	0
4832	86.9	1.26	95	4	5	2	0
4833	90.9	1.69	142	5	3	2	0
4834	40	2.38	208	5	4	2	0
4835	32.3	2.23	196	5	3	2	0
4836	38.3	1.43	121	6	2	1	0
4837	38.6	1.13	87	5	4	1	0
4838	55.2	1.12	83	5	5	1	0
4839	75.7	0.91	71	5	2	1	0
4840	75.6	0.94	65	6	3	2	0
4841	81.9	0.91	62	6	3	2	0
4842	60.8	0.92	63	6	3	2	0
4843	96.1	0.89	67	6	2	1	0
4844	86.8	0.86	64	6	2	1	0
4845	84	0.83	61	6	2	1	0
4846	105.7	0.94	74	5	2	1	0
4847	100.2	1.04	80	5	2	2	0
4848	97.4	1.07	83	5	2	2	0
4849	91.6	1.16	89	5	3	2	0
4850	85.4	1.06	82	4	4	1	0
4851	92.3	0.88	64	4	4	1	0
4852	97.6	0.80	60	5	2	1	0
4853	95.8	0.75	55	5	2	1	0
4854	101.9	0.75	57	4	2	1	0
4855	94.6	0.91	68	5	3	1	0
4856	88.8	0.92	71	4	3	1	0
4857	85.2	0.98	75	5	3	1	0
4858	54.9	0.93	70	5	3	1	0
4859	63.3	0.85	65	5	2	1	0
4860	98.3	0.82	55	5	3	2	0
4861	121.1	0.72	50	4	2	2	0
4862	116.5	0.83	61	4	2	2	0
4863	114	0.89	65	5	2	2	0
4864	131.2	0.94	70	5	2	2	0
4865	106.3	1.02	82	5	2	1	0
4866	119.1	1.13	93	5	2	1	0
4867	128.5	1.49	126	5	3	1	0
4868	125.4	2.20	190	7	4	1	0
4869	119	2.20	190	7	4	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4870	39.8	2.52	228	7	2	1	0
4871	100.8	2.52	228	7	2	1	0
4872	105.2	2.83	261	6	2	1	0
4873	100.4	2.83	261	6	2	1	0
4874	104.2	2.94	270	7	2	1	0
4875	29.6	0.55	34	4	3	1	0
4876	28	0.59	43	3	2	1	0
4877	54.4	0.53	34	3	3	1	0
4878	91.1	0.53	34	3	3	1	0
4879	111.2	0.49	35	2	2	1	0
4880	69.7	0.75	57	4	2	1	0
4881	86.1	0.75	57	4	2	1	0
4882	97.6	0.93	71	6	2	1	0
4883	109.7	0.93	71	6	2	1	0
4884	84.3	1.06	80	6	2	2	0
4885	103.5	1.35	99	6	4	3	0
4886	94.9	1.79	145	5	4	3	0
4887	89.1	2.14	196	4	2	1	0
4888	97.5	3.12	291	4	3	1	0
4889	101.6	3.25	291	9	4	1	0
4890	122.7	3.62	329	8	3	2	0
4891	104.9	3.62	329	8	3	2	0
4892	99.9	3.53	328	8	3	0	0
4893	98.2	3.56	328	8	4	0	0
4894	95.1	3.27	300	5	3	2	0
4895	99.4	3.27	300	5	3	2	0
4896	94.1	3.28	294	7	4	2	0
4897	82.5	3.26	300	6	2	2	0
4898	72	3.49	315	10	2	2	0
4899	84.4	3.95	354	10	3	3	0
4900	83.9	3.95	354	10	3	3	0
4901	101.9	3.95	354	10	3	3	0
4902	138.1	3.58	319	9	3	3	0
4903	99.2	2.23	207	8	0	0	0
4904	98.4	2.23	207	8	0	0	0
4905	98.1	2.38	204	8	2	3	0
4906	77.2	2.03	175	7	2	2	0
4907	71.9	1.92	157	5	3	4	0
4908	75.1	1.92	157	5	3	4	0
4909	65.4	1.67	141	3	4	2	0
4910	55.9	1.53	125	3	2	4	0
4911	66.1	1.48	120	5	2	3	0
4912	51.6	1.47	124	5	3	1	0
4913	26.6	1.59	133	4	2	3	0
4914	26.6	1.59	133	4	2	3	0
4915	18.7	1.09	76	4	3	4	0
4916	32.7	1.09	76	4	3	4	0
4917	40.5	0.96	67	4	3	3	0
4918	45.6	0.86	64	4	2	2	0
4919	67.3	0.87	64	3	3	2	0
4920	82.7	0.88	65	4	1	3	0
4921	88.5	0.88	65	4	1	3	0
4922	60.2	1.09	77	5	2	4	0
4923	59.8	1.09	83	6	2	2	0
4924	96	1.16	95	3	1	3	0
4925	77.3	1.18	95	3	3	2	0
4926	102.1	1.18	95	3	3	2	0
4927	77.5	1.42	112	8	2	2	0
4928	88.9	1.60	129	5	3	3	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4929	67	1.60	129	5	3	3	0
4930	72.9	1.60	128	5	2	4	0
4931	62.1	1.46	116	4	2	4	0
4932	64.5	1.21	103	4	2	1	0
4933	72.5	1.21	103	4	2	1	0
4934	83.1	1.42	103	5	3	5	0
4935	79.3	1.19	95	5	2	2	0
4936	64.5	1.03	90	5	1	0	0
4937	91.6	0.90	80	5	0	0	0
4938	93.7	1.08	92	5	2	0	0
4939	98.2	1.08	92	5	2	0	0
4940	74.9	1.22	94	5	2	3	0
4941	77.2	1.27	99	5	2	3	0
4942	71.9	1.27	99	5	2	3	0
4943	77.9	1.25	95	4	2	4	0
4944	96.5	1.17	92	4	3	2	0
4945	67.8	1.21	92	4	3	3	0
4946	77.1	1.24	98	4	2	3	0
4947	82	1.25	103	4	2	2	0
4948	87.7	1.30	101	4	3	3	0
4949	73.7	1.38	102	5	2	5	0
4950	97.9	1.41	103	6	2	5	0
4951	85.8	1.20	100	3	2	2	0
4952	97.2	1.20	100	3	2	2	0
4953	81.2	1.17	99	4	2	1	0
4954	90.8	1.18	98	5	2	1	0
4955	100.1	1.30	92	5	4	4	0
4956	47.3	1.12	85	5	3	2	0
4957	53.7	1.17	82	5	3	4	0
4958	70.7	1.13	85	5	2	3	0
4959	78.9	1.11	87	5	2	2	0
4960	73.3	0.93	63	4	2	4	0
4961	67.4	0.87	65	4	2	2	0
4962	85.6	0.82	60	4	2	2	0
4963	112.1	0.98	75	4	1	3	0
4964	89.4	1.05	70	5	3	4	0
4965	40.2	0.78	60	4	2	1	0
4966	83.6	0.93	79	4	2	0	0
4967	42.6	1.21	86	5	3	4	0
4968	31.3	1.14	84	4	2	4	0
4969	39.2	1.18	77	6	3	5	0
4970	34.2	0.95	83	3	2	0	0
4971	1.4	0.88	54	5	4	3	0
4972	59.9	0.68	46	4	2	2	0
4973	50.6	0.66	45	4	3	1	0
4974	84.3	0.60	43	4	3	0	0
4975	85.4	0.73	48	4	3	2	0
4976	90.2	0.78	56	5	4	0	0
4977	110.6	0.81	59	5	4	0	0
4978	87.5	1.03	82	4	3	1	0
4979	134.3	1.08	90	4	2	1	0
4980	101.1	1.35	114	4	3	1	0
4981	84.4	1.48	127	4	3	1	0
4982	69.6	1.40	115	4	3	2	0
4983	46.8	1.26	102	5	2	2	0
4984	67.6	1.14	94	5	2	1	0
4985	80.5	1.17	88	4	3	3	0
4986	80.3	1.18	87	5	3	3	0
4987	69	0.93	74	4	1	2	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4988	79.4	1.07	85	4	2	2	0
4989	71	1.03	81	4	2	2	0
4990	36.7	1.13	91	4	2	2	0
4991	42.6	1.08	83	4	3	2	0
4992	74.7	1.12	87	4	3	2	0
4993	59.1	1.15	85	5	4	2	0
4994	85.6	1.01	79	4	2	2	0
4995	60	1.03	78	4	3	2	0
4996	75.1	1.03	81	4	2	2	0
4997	46.7	1.17	88	6	3	2	0
4998	48.2	1.04	82	4	2	2	0
4999	59.5	0.90	71	4	1	2	0
5000	63.1	0.96	75	5	1	2	0
5001	61.7	0.92	71	5	1	2	0
5002	61.7	0.75	53	4	2	2	0
5003	60.7	0.75	53	4	2	2	0
5004	60.5	0.91	66	4	3	2	0
5005	59.6	0.87	65	4	2	2	0
5006	63.6	0.83	64	4	1	2	0
5007	64.9	0.95	68	5	3	2	0
5008	45.8	0.91	66	4	3	2	0
5009	63.9	0.98	71	5	3	2	0
5010	64.1	0.91	68	5	3	1	0
5011	60	0.87	64	5	3	1	0
5012	60.7	0.88	67	4	3	1	0
5013	67.6	0.88	67	4	3	1	0
5014	60.2	0.82	68	5	0	1	0
5015	76	0.82	68	5	0	1	0
5016	57.4	0.91	71	5	2	1	0
5017	72.8	0.89	69	5	2	1	0
5018	57.8	0.76	51	4	3	2	0
5019	60.4	0.92	67	4	3	2	0
5020	67	0.86	67	4	1	2	0
5021	58.5	0.82	58	5	2	2	0
5022	46.4	0.92	61	5	3	3	0
5023	79.5	0.92	61	5	3	3	0
5024	108.5	0.85	63	4	2	2	0
5025	64.5	1.00	75	4	3	2	0
5026	58.6	1.12	90	4	2	2	0
5027	118.7	1.20	98	4	2	2	0
5028	52.3	1.07	81	4	2	3	0
5029	59	1.10	84	4	2	3	0
5030	89.8	1.10	84	4	2	3	0
5031	88.4	0.96	71	4	3	2	0
5032	64.7	0.92	67	4	3	2	0
5033	89.4	0.92	67	4	3	2	0
5034	93.7	1.01	79	4	2	2	0
5035	95.7	1.01	79	4	2	2	0
5036	88.1	0.81	63	4	2	1	0
5037	66.6	0.95	71	5	2	2	0
5038	85.7	1.02	82	5	2	1	0
5039	105.6	1.02	82	5	2	1	0
5040	96.2	1.05	79	5	4	1	0
5041	83.4	1.07	79	6	4	1	0
5042	97.9	1.07	82	6	3	1	0
5043	83.6	1.06	83	5	3	1	0
5044	72.7	1.06	83	5	3	1	0
5045	47.5	1.02	79	5	3	1	0
5046	49.3	1.07	84	5	3	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5047	48.2	0.99	81	4	2	1	0
5048	76.4	0.98	78	5	2	1	0
5049	90.8	0.96	77	3	3	1	0
5050	47.8	0.97	77	5	2	1	0
5051	61	0.93	72	4	3	1	0
5052	80.5	0.99	75	4	4	1	0
5053	76	0.84	61	5	3	1	0
5054	78.2	0.46	26	5	2	1	0
5055	53.7	0.81	63	4	2	1	0
5056	54.7	0.85	74	4	1	0	0
5057	37.5	0.91	70	4	3	1	0
5058	61.2	0.77	58	3	3	1	0
5059	79.8	0.33	14	3	3	1	0
5060	57.4	0.43	22	4	3	1	0
5061	62.4	0.35	21	2	2	1	0
5062	58.9	0.35	21	2	2	1	0
5063	88.5	0.34	20	2	2	1	0
5064	78.6	0.64	45	3	3	1	0
5065	74.9	0.72	53	3	3	1	0
5066	62.9	0.30	16	2	2	1	0
5067	1.2	0.30	16	2	2	1	0
5068	66.6	0.33	19	2	2	1	0
5069	14.3	0.35	21	2	2	1	0
5070	71	0.37	26	2	1	1	0
5071	85.9	0.37	26	2	1	1	0
5072	88.8	0.30	19	2	1	1	0
5073	37.8	0.49	30	3	3	1	0
5074	46	0.61	47	2	2	1	0
5075	61.7	2.09	181	9	2	1	0
5076	101.9	2.26	195	9	3	1	0
5077	5	0.61	39	3	4	1	0
5078	36.8	0.37	26	2	1	1	0
5079	8.1	0.32	18	2	2	1	0
5080	28.3	0.32	18	2	2	1	0
5081	30	0.32	18	2	2	1	0
5082	32.4	0.43	24	3	3	1	0
5083	41.2	0.39	20	3	3	1	0
5084	43.7	0.47	21	4	2.8	2.4	0
5085	44.7	0.48	23.8	5.1	3.1	1.1	0
5086	44.1	0.37	20.1	3.5	2.1	0.8	0
5087	37.6	0.52	24.1	3.2	3	3	0
5088	53	0.43	23.3	3.1	1.8	1.9	0
5089	41.2	0.46	25.7	3.3	2.3	1.7	0
5090	29.4	0.51	26.7	1.5	2.3	3.5	0
5091	37.7	0.48	27	2	3	2	0
5092	35.1	0.49	28	2	3	2	0
5093	31	0.59	34	3	1	4	0
5094	31	0.59	34	3	1	4	0
5095	31	0.59	34	3	1	4	0
5096	26.9	0.61	42	4	1	2	0
5097	33.8	0.71	50	2	3	2	0
5098	43.2	0.72	47	2	3	3	0
5099	25.8	0.41	17	3	2	3	0
5100	9.3	0.76	41	5	3	4	0
5101	29.2	0.47	37	2	2	0	0
5102	31.9	0.71	42	4	3	3	0
5103	9.8	0.74	52	4	2	2	0
5104	82.4	0.77	48	4	3	3	0
5105	82.8	0.42	42	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5106	49.2	0.70	46	3	2	3	0
5107	92.7	0.84	48	5	2	5	0
5108	103.8	0.65	52	2	3	0	0
5109	55.8	0.64	50	2	2	1	0
5110	116.9	0.67	49	2	2	2	0
5111	116.1	0.82	51	4	1	5	0
5112	65.5	0.81	55	4	2	3	0
5113	89.1	0.85	56	4	3	3	0
5114	71.2	0.80	57	3	3	2	0
5115	73.4	0.82	62	5	2	1	0
5116	58.6	0.79	61	4	2	1	0
5117	73.4	0.64	50	2	2	1	0
5118	73.8	0.55	42	3	1	1	0
5119	103.3	0.55	42	3	1	1	0
5120	68	0.62	44	4	2	1	0
5121	36.1	0.62	44	4	2	1	0
5122	66.1	0.61	45	3	2	1	0
5123	71.2	0.59	47	1	2	1	0
5124	76.7	0.66	54	1	2	1	0
5125	42.2	0.83	72	2	1	1	0
5126	67	0.83	72	2	1	1	0
5127	72.3	0.78	61	2	3	1	0
5128	92	0.78	61	2	3	1	0
5129	71.2	0.78	61	2	3	1	0
5130	84.9	0.78	61	2	3	1	0
5131	85.9	0.67	50	2	3	1	0
5132	68.6	0.62	45	2	3	1	0
5133	55.1	0.61	47	2	2	1	0
5134	74.4	0.62	48	2	2	1	0
5135	63.4	0.62	48	2	2	1	0
5136	77	0.62	48	2	2	1	0
5137	52.9	0.60	42	4	2	1	0
5138	77.8	0.60	42	4	2	1	0
5139	67.7	0.68	50	4	2	1	0
5140	53.4	0.66	53	3	1	1	0
5141	48.4	0.56	47	3	1	0	0
5142	88.9	0.60	50	2	2	0	0
5143	84.1	0.80	70	2	2	0	0
5144	68.7	0.85	75	2	2	0	0
5145	82.3	0.84	70	2	2	1	0
5146	72.3	0.91	75	3	2	1	0
5147	104.7	0.90	74	3	2	1	0
5148	95.6	0.46	35	2	1	1	0
5149	103.4	0.47	36	2	1	1	0
5150	92.4	0.49	38	2	1	1	0
5151	77.4	0.56	40	3	2	1	0
5152	92.1	0.56	40	3	2	1	0
5153	106.7	0.56	40	3	2	1	0
5154	90.5	0.58	42	3	2	1	0
5155	87.9	0.83	65	4	2	1	0
5156	77.5	0.83	65	4	2	1	0
5157	87.7	0.86	68	4	2	1	0
5158	88.1	0.98	75	5	3	1	0
5159	39.9	0.81	58	5	3	1	0
5160	59	0.82	59	5	3	1	0
5161	62.2	0.85	60	6	3	1	0
5162	81.2	0.44	32	3	2	0	0
5163	114.5	0.41	24	4	3	0	0
5164	92.6	0.39	26	2	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5165	96.4	0.40	29	1	3	0	0
5166	80.1	0.57	36	4	3	1	0
5167	62.3	0.64	41	5	3	1	0
5168	71.6	0.52	31	4	3	1	0
5169	69.6	0.42	28	2	2	1	0
5170	70.4	0.50	36	2	2	1	0
5171	74.9	0.52	38	2	2	1	0
5172	78.2	0.50	34	3	2	1	0
5173	79.3	0.46	30	3	2	1	0
5174	68.3	0.34	20	2	2	1	0
5175	45.4	0.42	23	3	3	1	0
5176	74.4	0.47	28	3	3	1	0
5177	65.2	0.50	36	2	2	1	0
5178	41.3	0.45	21	4	4	1	0
5179	29.1	0.36	22	2	2	1	0
5180	33.1	0.34	18	3	2	1	0
5181	37.8	0.39	23	3	2	1	0
5182	44.1	0.46	30	3	2	1	0
5183	37.6	0.26	16	2	2	0	0
5184	40	0.49	25	4	4	1	0
5185	75.3	0.39	20	3	3	1	0
5186	72.7	0.39	20	3	3	1	0
5187	83.3	0.38	24	2	2	1	0
5188	85.6	0.34	24	2	2	0	0
5189	71.3	0.29	18	2	1	1	0
5190	60.2	0.34	18	3	2	1	0
5191	71.1	0.35	19	3	2	1	0
5192	60.6	0.32	14	4	2	1	0
5193	73.8	0.37	14	5	3	1	0
5194	63.3	0.30	11	3	3	1	0
5195	64.1	0.33	25	1	2	0	0
5196	61.6	0.19	10	1	1	1	0
5197	52	0.33	14	3	3	1	0
5198	60.9	0.33	14	3	3	1	0
5199	55.8	0.33	14	3	3	1	0
5200	72.6	0.36	18	4	2	1	0
5201	70.6	0.36	11	6	3	1	0
5202	61.9	0.35	21	2	2	1	0
5203	53.9	0.35	15	5	2	1	0
5204	66.5	0.53	25	6	4	1	0
5205	59.7	0.46	23	5	3	1	0
5206	56.1	0.26	13	3	1	1	0
5207	66.1	0.30	16	2	2	1	0
5208	55.5	0.41	22	3	3	1	0
5209	63.3	0.40	21	3	3	1	0
5210	68.6	0.34	22	1	2	1	0
5211	54.8	0.34	22	1	2	1	0
5212	43.5	0.25	17	1	2	0	0
5213	85.9	0.34	20	2	2	1	0
5214	69.9	0.25	11	2	2	1	0
5215	58.6	0.25	11	2	2	1	0
5216	23.2	0.30	11	3	3	1	0
5217	26.6	0.34	18	3	2	1	0
5218	27	0.41	20	4	3	1	0
5219	27	0.41	20	4	3	1	0
5220	27	0.41	20	4	3	1	0
5221	27	0.41	20	4	3	1	0
5222	28.1	0.27	15	1	2	1	0
5223	49.5	0.32	16	3	2	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5224	44.6	0.39	21	4	2	1	0
5225	44	0.48	29	3	3	1	0
5226	41.4	0.53	34	3	3	1	0
5227	22.2	0.42	30	1	2	1	0
5228	23.4	0.32	16	3	2	1	0
5229	46.7	0.31	16	3	3	0	0
5230	29.4	0.31	15	3	2	1	0
5231	77.9	0.34	14	5	2	1	0
5232	70.7	0.34	14	5	2	1	0
5233	35.9	0.30	14	3	2	1	0
5234	53.5	0.27	16	2	1	1	0
5235	79.9	0.34	16	4	2	1	0
5236	67.1	0.31	10	4	3	1	0
5237	91.8	0.34	15	3	3	1	0
5238	92.9	0.30	16	2	2	1	0
5239	78.9	0.30	16	2	2	1	0
5240	97.3	0.31	14	2	3	1	0
5241	70.7	0.35	14	4	3	1	0
5242	67.8	0.42	26	3	2	1	0
5243	56	0.41	18	5	3	1	0
5244	47.7	0.33	17	3	2	1	0
5245	30.3	0.37	20	2	3	1	0
5246	46.4	0.36	22	2	2	1	0
5247	89.8	0.50	22	6	4	1	0
5248	51.7	0.42	20	6	2	1	0
5249	50.4	0.36	17	3	3	1	0
5250	65.8	0.39	13	5	4	1	0
5251	40.1	0.35	21	2	2	1	0
5252	46.4	0.36	20	3	2	1	0
5253	71.9	0.42	28	2	2	1	0
5254	73.3	0.50	34	3	2	1	0
5255	34.5	0.52	36	3	2	1	0
5256	51	0.35	24	2	1	1	0
5257	56.8	0.35	24	2	1	1	0
5258	56.8	0.35	24	2	1	1	0
5259	50	0.43	30	3	1	1	0
5260	45	0.43	30	3	1	1	0
5261	56	0.43	30	3	1	1	0
5262	39	0.43	30	3	1	1	0
5263	49.3	0.43	30	3	1	1	0
5264	42.5	0.52	34	4	2	1	0
5265	29.6	0.52	34	4	2	1	0
5266	38.7	0.52	34	4	2	1	0
5267	29.4	0.44	32	1	2	1	0
5268	29.7	0.44	32	1	2	1	0
5269	24.7	0.37	30	2	1	0	0
5270	14.4	0.48	38	2	2	0	0
5271	28	0.48	38	2	2	0	0
5272	28	0.51	42	3	1	0	0
5273	40.4	0.51	42	3	1	0	0
5274	33.6	0.68	52	5	2	0	0
5275	35.1	0.66	53	2	3	0	0
5276	37.8	0.64	57	2	1	0	0
5277	49.9	0.64	54	2	2	0	0
5278	45.7	0.68	56	3	2	0	0
5279	40.1	0.65	53	3	2	0	0
5280	32.2	0.62	52	2	2	0	0
5281	44.6	0.61	51	2	2	0	0
5282	56	0.74	59	3	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5283	49.8	0.84	66	3	4	0	0
5284	63.3	0.79	67	3	2	0	0
5285	43.8	0.76	64	3	2	0	0
5286	45.7	0.77	58	5	3	0	0
5287	76	0.77	58	5	3	0	0
5288	65.2	0.67	55	3	2	0	0
5289	58	0.63	56	2	1	0	0
5290	62.3	0.61	52	3	1	0	0
5291	25.8	0.69	59	2	2	0	0
5292	27.1	0.56	42	4	2	0	0
5293	30.4	0.43	36	2	1	0	0
5294	17.2	0.48	41	2	1	0	0
5295	14	0.51	39	3	2	0	0
5296	18.9	0.42	36	3	0	0	0
5297	40.9	0.43	31	3	2	0	0
5298	53.9	0.39	29	2	2	0	0
5299	71.2	0.42	30	3	2	0	0
5300	70.3	0.42	30	3	2	0	0
5301	50.2	0.41	32	3	1	0	0
5302	30	0.40	30	2	2	0	0
5303	35.1	0.42	27	3	3	0	0
5304	29.2	0.40	32	1	2	0	0
5305	23.1	0.38	28	2	2	0	0
5306	43.8	0.36	29	2	1	0	0
5307	41	0.41	29	3	2	0	0
5308	32.9	0.38	26	3	2	0	0
5309	37	0.35	27	1	2	0	0
5310	47.1	0.41	31	2	2	0	0
5311	38	0.28	16	3	2	0	0
5312	31	0.41	25	5	2	0	0
5313	46.6	0.35	28	2	1	0	0
5314	55	0.42	30	3	2	0	0
5315	50.6	0.37	27	2	2	0	0
5316	68.2	0.37	27	2	2	0	0
5317	53.9	0.40	33	2	1	0	0
5318	60.2	0.33	26	2	1	0	0
5319	42.5	0.45	33	3	2	0	0
5320	46.1	0.38	26	3	2	0	0
5321	32.6	0.42	30	3	2	0	0
5322	49.3	0.44	27	4	3	0	0
5323	64.3	0.35	26	3	1	0	0
5324	50	0.39	27	3	2	0	0
5325	46.5	0.43	26	4	3	0	0
5326	26.9	0.43	26	4	3	0	0
5327	48.4	0.46	34	3	2	0	0
5328	39.3	0.39	27	3	2	0	0
5329	49.5	0.38	21	4	3	0	0
5330	34.4	0.27	20	2	1	0	0
5331	30.3	0.36	24	3	2	0	0
5332	40	0.35	23	3	2	0	0
5333	30.6	0.29	22	2	1	0	0
5334	30.2	0.29	17	3	2	0	0
5335	30.9	0.39	22	4	3	0	0
5336	34.1	0.32	20	3	2	0	0
5337	30.4	0.24	17	2	1	0	0
5338	34.1	0.33	21	3	2	0	0
5339	26.4	0.29	17	3	2	0	0
5340	39.7	0.29	17	3	2	0	0
5341	27.2	0.30	18	3	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5342	31.2	0.31	19	3	2	0	0
5343	32.1	0.34	17	4	3	0	0
5344	35.6	0.32	23	3	1	0	0
5345	37.6	0.37	25	3	2	0	0
5346	37.7	0.37	25	3	2	0	0
5347	37.5	0.36	24	3	2	0	0
5348	46.9	0.28	19	3	1	0	0
5349	40.1	0.27	15	3	2	0	0
5350	40.6	0.33	21	3	2	0	0
5351	41.3	0.37	20	4	3	0	0
5352	29.3	0.27	20	2	1	0	0
5353	30.4	0.30	18	3	2	0	0
5354	33.3	0.27	15	3	2	0	0
5355	31.6	0.30	18	3	2	0	0
5356	34.2	0.27	18	3	1	0	0
5357	31.4	0.24	12	3	2	0	0
5358	35.4	0.30	18	3	2	0	0
5359	40.6	0.31	19	3	2	0	0
5360	41.2	0.26	19	2	1	0	0
5361	40.8	0.36	14	5	4	0	0
5362	31.2	0.23	16	2	1	0	0
5363	33.1	0.30	18	3	2	0	0
5364	35.5	0.31	19	3	2	0	0
5365	27	0.23	16	2	1	0	0
5366	37.8	0.27	20	2	1	0	0
5367	38.1	0.27	20	2	1	0	0
5368	39.6	0.27	20	2	1	0	0
5369	38.8	0.27	20	2	1	0	0
5370	33.9	0.29	17	3	2	0	0
5371	31.3	0.30	18	3	2	0	0
5372	38.4	0.26	14	3	2	0	0
5373	42.5	0.27	15	3	2	0	0
5374	34.8	0.26	14	3	2	0	0
5375	39.1	0.31	17	4	2	0	0
5376	42.6	0.23	14	3	1	0	0
5377	57.7	0.32	18	4	2	0	0
5378	58	0.31	17	4	2	0	0
5379	46.4	0.26	14	3	2	0	0
5380	38.4	0.24	14	2	2	0	0
5381	39.8	0.28	16	3	2	0	0
5382	38.8	0.37	20	4	3	0	0
5383	38.6	0.41	25	5	2	0	0
5384	43.6	0.34	20	4	2	0	0
5385	42.5	0.35	21	4	2	0	0
5386	42.5	0.35	21	4	2	0	0
5387	46.8	0.36	22	4	2	0	0
5388	44.5	0.34	20	4	2	0	0
5389	39.9	0.42	23	5	3	0	0
5390	43.9	0.50	32	6	2	0	0
5391	35.7	0.48	33	6	1	0	0
5392	28.9	0.49	31	6	2	0	0
5393	22.3	0.57	33	6	4	0	0
5394	7.5	0.53	30	7	3	0	0
5395	6.3	0.56	36	7	2	0	0
5396	12.5	0.55	35	7	2	0	0
5397	27.1	0.51	35	5	2	0	0
5398	25.7	0.35	24	1	3	0	0
5399	42.8	0.28	21	2	1	0	0
5400	41.6	0.39	25	4	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5401	43.6	0.35	19	5	2	0	0
5402	34.8	0.37	23	4	2	0	0
5403	39.1	0.33	23	2	2	0	0
5404	9.6	0.34	24	2	2	0	0
5405	24.5	0.42	32	2	2	0	0
5406	44.7	0.46	36	2	2	0	0
5407	40.5	0.44	35	3	1	0	0
5408	44.1	0.38	31	2	1	0	0
5409	42.5	0.49	27	5	4	0	0
5410	32.8	0.41	26	3	3	0	0
5411	77.5	0.25	13	3	2	0	0
5412	84.7	0.20	15	1	1	0	0
5413	48.2	0.26	19	2	1	0	0
5414	56.9	0.42	30	3	2	0	0
5415	56.6	0.42	30	3	2	0	0
5416	38.8	0.31	22	3	1	0	0
5417	40	0.37	25	3	2	0	0
5418	31.9	0.30	18	3	2	0	0
5419	44.7	0.47	31.3	3.9	2.7	0	0
5420	35	0.45	32.3	3.7	1.7	0	0
5421	50.4	0.42	33.4	3.5	0.6	0	0
5422	33	0.42	33.9	3.2	0.5	0	0
5423	37.6	0.43	34.5	2.7	0.9	0	0
5424	39.2	0.32	24.9	1.5	1.5	0	0
5425	31.5	0.30	21.1	2.3	1.5	0	0
5426	34	0.33	19.3	4.2	1.8	0	0
5427	28.3	0.34	20.3	3.8	1.9	0	0
5428	42.1	0.34	22.5	2.4	2.3	0	0
5429	38.5	0.33	20.6	2.9	2.1	0	0
5430	28.3	0.31	21.7	3.5	0.9	0	0
5431	24.6	0.26	21.9	1.2	0.4	0	0
5432	31.7	0.33	22.5	3.5	1.2	0	0
5433	40.7	0.37	28.1	1.5	2.1	0	0
5434	31.5	0.34	24.3	2.4	1.7	0	0
5435	26.1	0.26	19.3	1.5	1.2	0	0
5436	31	0.27	20.6	1.7	1.1	0	0
5437	31	0.21	20.9	0	0	0	0
5438	25.6	0.27	21.9	1	1	0	0
5439	34.6	0.26	18.4	2.3	0.9	0	0
5440	31.8	0.32	20	2.6	2.2	0	0
5441	31.6	0.33	21.7	2.7	2	0	0
5442	32.2	0.32	22.5	2.4	1.4	0	0
5443	35.2	0.28	21.7	0.8	1.5	0	0
5444	35.2	0.28	21.7	0.8	1.5	0	0
5445	35.2	0.28	21.7	0.8	1.5	0	0
5446	32	0.33	23.8	2.1	1.7	0	0
5447	32.7	0.35	22.3	2.4	2.5	0	0
5448	37.2	0.35	24.1	2.3	2	0	0
5449	42.3	0.31	21.7	3.5	0.6	0	0
5450	30.5	0.33	22	3.3	1.5	0	0
5451	35.2	0.35	21	4	2	0	0
5452	31.8	0.33	21	3	2	0	0
5453	44	0.34	22	3	2	0	0
5454	32.5	0.27	18	3	1	0	0
5455	38.4	0.31	19	3	2	0	0
5456	33.7	0.32	20	3	2	0	0
5457	34.4	0.23	16	2	1	0	0
5458	34.7	0.39	17	5	4	0	0
5459	28.8	0.31	22	3	1	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5460	30.9	0.27	15	3	2	0	0
5461	34.7	0.35	23	3	2	0	0
5462	30.5	0.36	19	4	3	0	0
5463	31.2	0.32	20	3	2	0	0
5464	32.4	0.30	18	3	2	0	0
5465	20.8	0.46	24	5	4	0	0
5466	20.9	0.39	22	4	3	0	0
5467	25.6	0.34	22	3	2	0	0
5468	22	0.26	22	2	0	0	0
5469	17.6	0.47	33	4	2	0	0
5470	28.6	0.39	26	2	3	0	0
5471	25.5	0.28	21	2	1	0	0
5472	53	0.35	25	2	2	0	0
5473	42.2	0.25	21	2	0	0	0
5474	54.7	0.32	22	2	2	0	0
5475	34	0.32	25	2	1	0	0
5476	42	0.33	26	2	1	0	0
5477	36.8	0.25	20	1	1	0	0
5478	44.7	0.30	21	3	1	0	0
5479	35.9	0.40	25	3	3	0	0
5480	41.7	0.40	27	2	3	0	0
5481	38	0.35	23	3	2	0	0
5482	41.5	0.37	22	3	3	0	0
5483	41.1	0.34	23	4	1	0	0
5484	34.9	0.35	23	3	2	0	0
5485	40.1	0.40	28	3	2	0	0
5486	30.4	0.33	24	3	1	0	0
5487	37.9	0.35	21	4	2	0	0
5488	36.1	0.37	21	5	2	0	0
5489	36.8	0.39	29	2	2	0	0
5490	32.9	0.39	29	2	2	0	0
5491	27.2	0.38	26	3	2	0	0
5492	31.9	0.29	22	2	1	0	0
5493	30.3	0.31	21	2	2	0	0
5494	34.2	0.32	23	3	1	0	0
5495	37	0.40	28	3	2	0	0
5496	33.2	0.44	30	4	2	0	0
5497	20.5	0.37	23	4	2	0	0
5498	28.1	0.38	27	4	1	0	0
5499	31.4	0.37	26	4	1	0	0
5500	29.4	0.37	25	3	2	0	0
5501	37.3	0.32	23	3	1	0	0
5502	33.6	0.40	28	3	2	0	0
5503	39	0.36	26	2	2	0	0
5504	35.2	0.32	22	2	2	0	0
5505	26	0.41	30	4	1	0	0
5506	40.9	0.23	6	4	3	0	0
5507	34	0.40	26	4	2	0	0
5508	35.8	0.36	22	4	2	0	0
5509	39.1	0.33	19	4	2	0	0
5510	46.3	0.37	23	4	2	0	0
5511	36.4	0.38	24	4	2	0	0
5512	41.6	0.27	16	4	1	0	0
5513	34.2	0.38	27	4	1	0	0
5514	34	0.42	28	4	2	0	0
5515	35	0.34	20	4	2	0	0
5516	16.1	0.37	23	4	2	0	0
5517	13	0.35	21	4	2	0	0
5518	30.1	0.58	42	5	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5519	34.9	0.43	27	5	2	0	0
5520	13.2	0.41	22	5	3	0	0
5521	31.4	0.40	25	3	3	0	0
5522	36.1	0.41	26	3	3	0	0
5523	32.7	0.41	29	3	2	0	0
5524	37.6	0.37	28	3	1	0	0
5525	35	0.47	35	3	2	0	0
5526	40.1	0.30	24	3	0	0	0
5527	29	0.35	26	3	1	0	0
5528	40.6	0.47	33	4	2	0	0
5529	37.6	0.42	28	4	2	0	0
5530	44.9	0.38	30	4	0	0	0
5531	36.7	0.48	34	4	2	0	0
5532	47.4	0.41	30	4	1	0	0
5533	41.4	0.41	32	3	1	0	0
5534	98.7	0.41	29	3	2	0	0
5535	49	0.40	31	3	1	0	0
5536	51.6	0.47	35	3	2	0	0
5537	55.6	0.39	27	3	2	0	0
5538	47.9	0.39	27	3	2	0	0
5539	43.6	0.32	23	3	1	0	0
5540	56.4	0.38	26	3	2	0	0
5541	54	0.42	33	3	1	0	0
5542	45.5	0.36	26	2	2	0	0
5543	20.9	0.37	27	2	2	0	0
5544	38	0.34	22	3	2	0	0
5545	39.5	0.38	24	4	2	0	0
5546	35.9	0.37	30	2	1	0	0
5547	35.7	0.39	27	3	2	0	0
5548	41.2	0.37	25	3	2	0	0
5549	41.7	0.39	27	3	2	0	0
5550	63.1	0.38	26	3	2	0	0
5551	53.2	0.38	26	3	2	0	0
5552	59.1	0.38	29	3	1	0	0
5553	40.2	0.36	26	2	2	0	0
5554	38.9	0.34	25	3	1	0	0
5555	39.8	0.38	26	3	2	0	0
5556	51.1	0.39	30	3	1	0	0
5557	46.7	0.39	23	5	2	0	0
5558	44.7	0.37	22	3	3	0	0
5559	45.9	0.39	23	5	2	0	0
5560	35	0.35	23	3	2	0	0
5561	40.4	0.28	16	3	2	0	0
5562	47.9	0.42	30	3	2	0	0
5563	38.6	0.31	22	3	1	0	0
5564	40.1	0.30	18	3	2	0	0
5565	39.9	0.33	23	2	2	0	0
5566	33.3	0.22	12	2	2	0	0
5567	45.8	0.31	21	2	2	0	0
5568	48	0.31	21	2	2	0	0
5569	29.8	0.33	26	2	1	0	0
5570	25.6	0.38	28	2	2	0	0
5571	34.1	0.41	29	3	2	0	0
5572	34.6	0.40	31	3	1	0	0
5573	36.8	0.37	25	3	2	0	0
5574	37.5	0.40	31	3	1	0	0
5575	26.9	0.40	31	3	1	0	0
5576	43.3	0.38	26	3	2	0	0
5577	33.5	0.52	36	5	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5578	34.3	0.34	25	3	1	0	0
5579	36.4	0.39	27	3	2	0	0
5580	38.4	0.39	30	3	1	0	0
5581	29.5	0.37	27	2	2	0	0
5582	83.7	0.37	27	2	2	0	0
5583	67.6	0.39	27	3	2	0	0
5584	35.8	0.41	32	3	1	0	0
5585	35.8	0.41	32	3	1	0	0
5586	27.9	0.46	34	3	2	0	0
5587	31.9	0.40	26	4	2	0	0
5588	31.1	0.42	28	4	2	0	0
5589	43.5	0.35	24	4	1	0	0
5590	44.6	0.41	29	3	2	0	0
5591	42.8	0.37	28	3	1	0	0
5592	48.7	0.37	28	3	1	0	0
5593	38.6	0.35	26	3	1	0	0
5594	46.2	0.41	30	4	1	0	0
5595	34.1	0.44	30	4	2	0	0
5596	23.3	0.38	27	4	1	0	0
5597	24.8	0.34	25	3	1	0	0
5598	28.7	0.34	25	3	1	0	0
5599	30.1	0.38	26	3	2	0	0
5600	35.2	0.41	29	3	2	0	0
5601	28.8	0.45	33	3	2	0	0
5602	33.4	0.45	33	3	2	0	0
5603	31.4	0.48	34	4	2	0	0
5604	33.4	0.44	33	4	1	0	0
5605	27.4	0.44	30	4	2	0	0
5606	37.6	0.39	25	4	2	0	0
5607	35	0.36	25	4	1	0	0
5608	38.1	0.40	29	4	1	0	0
5609	36.2	0.44	31	5	1	0	0
5610	35	0.50	34	5	2	0	0
5611	55.2	0.27	11	5	2	0	0
5612	40.4	0.31	20	4	1	0	0
5613	43.1	0.35	21	4	2	0	0
5614	34.4	0.56	42	4	2	0	0
5615	35	0.48	32	5	2	0	0
5616	34.8	0.46	36	5	0	0	0
5617	44.3	0.46	33	5	1	0	0
5618	45.7	0.42	29	5	1	0	0
5619	42.1	0.46	30	5	2	0	0
5620	38.5	0.41	27	4	2	0	0
5621	47.4	0.47	30	4	3	0	0
5622	41.8	0.44	30	4	2	0	0
5623	46.3	0.32	25	2	1	0	0
5624	42	0.45	28	4	3	0	0
5625	27	0.37	26	4	1	0	0
5626	36.7	0.44	33	4	1	0	0
5627	48.8	0.42	31	4	1	0	0
5628	39.9	0.47	34	5	1	0	0
5629	37.8	0.42	30	3	2	0	0
5630	42.5	0.42	30	3	2	0	0
5631	33.9	0.38	27	4	1	0	0
5632	34.8	0.46	29	4	3	0	0
5633	44.8	0.44	30	4	2	0	0
5634	34.8	0.49	32	4	3	0	0
5635	39.8	0.47	33	4	2	0	0
5636	38.1	0.52	38	4	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5637	37.9	0.44	33	4	1	0	0
5638	33.7	0.43	27	5	2	0	0
5639	33.3	0.51	32	5	3	0	0
5640	37.1	0.44	28	5	2	0	0
5641	28.4	0.45	29	5	2	0	0
5642	23.2	0.42	29	5	1	0	0
5643	19.7	0.30	22	4	0	0	0
5644	46.8	0.38	24	4	2	0	0
5645	32.2	0.36	22	4	2	0	0
5646	38.6	0.37	23	4	2	0	0
5647	39.9	0.35	23	3	2	0	0
5648	36.8	0.32	26	3	0	0	0
5649	38.4	0.30	18	3	2	0	0
5650	40.5	0.35	23	3	2	0	0
5651	42.8	0.36	24	3	2	0	0
5652	42.2	0.40	29	4	1	0	0
5653	38.8	0.38	27	4	1	0	0
5654	32.9	0.31	22	3	1	0	0
5655	44	0.33	22	4	1	0	0
5656	38.1	0.33	26	2	1	0	0
5657	41.2	0.36	29	2	1	0	0
5658	34	0.36	22	4	2	0	0
5659	41.3	0.39	25	4	2	0	0
5660	43.9	0.36	22	4	2	0	0
5661	43.9	0.46	34	3	2	0	0
5662	38.6	0.44	30	4	2	0	0
5663	55.8	0.47	30	4	3	0	0
5664	43.1	0.40	28	3	2	0	0
5665	40.1	0.40	28	3	2	0	0
5666	38.8	0.40	30	2	2	0	0
5667	34.2	0.42	31	4	1	0	0
5668	40.9	0.42	30	3	2	0	0
5669	49.7	0.38	26	3	2	0	0
5670	40.4	0.41	29	3	2	0	0
5671	43.7	0.46	32	4	2	0	0
5672	40.9	0.45	28	4	3	0	0
5673	32.5	0.40	26	4	2	0	0
5674	32.5	0.46	30	5	2	0	0
5675	23.2	0.39	20	5	3	0	0
5676	46.6	0.39	20	5	3	0	0
5677	61.9	0.37	24	5	1	0	0
5678	49.2	0.33	22	4	1	0	0
5679	25.3	0.35	24	4	1	0	0
5680	22	0.38	21	4	3	0	0
5681	53.4	0.29	22	2	1	0	0
5682	51	0.33	26	2	1	0	0
5683	42.3	0.31	24	2	1	0	0
5684	44.6	0.40	23	4	3	0	0
5685	46.4	0.37	20	4	3	0	0
5686	44.1	0.37	20	4	3	0	0
5687	43.9	0.42	25	4	3	0	0
5688	35.9	0.42	28	4	2	0	0
5689	50.2	0.39	28	4	1	0	0
5690	36	0.39	25	4	2	0	0
5691	61.1	0.39	25	4	2	0	0
5692	58.9	0.34	20	4	2	0	0
5693	40.5	0.33	21	3	2	0	0
5694	51.3	0.39	24	3	3	0	0
5695	49.2	0.37	25	3	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5696	47	0.33	24	3	1	0	0
5697	37.1	0.34	25	3	1	0	0
5698	39.9	0.38	29	3	1	0	0
5699	46.7	0.34	25	3	1	0	0
5700	42.4	0.33	21	3	2	0	0
5701	46.6	0.34	20	4	2	0	0
5702	38.4	0.32	20	3	2	0	0
5703	33.7	0.31	24	2	1	0	0
5704	48.1	0.36	22	4	2	0	0
5705	36.9	0.37	23	4	2	0	0
5706	15.3	0.35	23	3	2	0	0
5707	30.6	0.23	16	2	1	0	0
5708	17.4	0.28	18	2	2	0	0
5709	16.2	0.39	23	2	4	0	0
5710	17.9	0.40	30	2	2	0	0
5711	32.7	0.32	19	2	3	0	0
5712	57.4	0.30	20	2	2	0	0
5713	33	0.19	14	1	1	0	0
5714	38.5	0.26	14	3	2	0	0
5715	26.7	0.32	18	4	2	0	0
5716	17.4	0.28	14	4	2	0	0
5717	13.5	0.29	16	5	1	0	0
5718	14	0.47	26	6	3	0	0
5719	20.5	0.29	15	4	2	0	0
5720	35.8	0.31	14	4	3	0	0
5721	36.2	0.35	18	4	3	0	0
5722	27.5	0.34	22	3	2	0	0
5723	37.4	0.37	25	3	2	0	0
5724	40.2	0.35	23	3	2	0	0
5725	23.5	0.38	26	3	2	0	0
5726	13.3	0.39	27	3	2	0	0
5727	25	0.43	29	4	2	0	0
5728	13.6	0.70	47	7	3	0	0
5729	17.1	0.69	55	4	2	0	0
5730	13.6	0.71	43	8	4	0	0
5731	23.8	0.80	66	4	2	0	0
5732	36.5	0.77	58	5	3	0	0
5733	46.8	0.72	55	4	3	0	0
5734	36.9	0.65	51	4	2	0	0
5735	54.4	0.65	51	4	2	0	0
PALEGREDA Fm.							
5736	41.4	0.67	51	5	2	0	0
5737	54.2	0.65	51	4	2	0	0
5738	36.4	0.99	78	6	3	0	0
5739	45.6	1.05	84	6	3	0	0
5740	34.4	1.34	97	8	3	3	0
5741	42.5	1.37	103	7	4	2	0
5742	44.8	1.38	106	6	4	2	0
5743	45	1.43	113	5	4	2	0
5744	35.8	1.33	108	4	3	2	0
5745	46.8	1.27	100	5	3	2	0
5746	59.2	1.32	110	5	4	0	0
5747	44	1.37	110	6	5	0	0
5748	50.7	1.27	100	6	5	0	0
5749	50.7	1.23	99	6	4	0	0
5750	33.7	1.36	110	7	4	0	0
5751	27.6	1.36	112	6	4	0	0
5752	45.5	1.29	105	6	4	0	0
5753	36.9	1.28	106	5	4	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5754	56.2	1.76	154	5	4	0	0
5755	49.3	2.00	178	5	4	0	0
5756	38.1	2.62	243	5	3	0	0
5757	44.8	4.51	430	6	3	0	0
5758	64.6	5.48	515	9	5	0	0
5759	47.4	5.48	515	9	5	0	0
5760	56.1	3.51	321	9	4	0	0
5761	48.7	2.20	196	6	4	0	0
5762	43.6	1.93	166	6	5	0	0
5763	48.2	1.87	161	7	4	0	0
5764	62.1	1.90	161	7	5	0	0
5765	50.2	1.84	158	7	4	0	0
5766	80.4	1.90	164	7	4	0	0
5767	28.1	1.78	154	6	4	0	0
5768	42.4	1.75	154	6	3	0	0
5769	38.7	1.46	125	6	3	0	0
5770	29.7	1.55	131	6	4	0	0
5771	46	1.40	124	5	2	0	0
5772	34.1	1.38	122	5	2	0	0
5773	32.6	1.38	122	5	2	0	0
5774	35.9	1.48	127	6	3	0	0
5775	39.7	1.53	132	6	3	0	0
5776	33.8	2.02	171	8	5	0	0
5777	34.4	2.08	182	7	4	0	0
5778	36.1	3.04	268	9	6	0	0
5779	49.5	4.17	386	8	5	0	0
5780	35.8	4.82	459	7	3	0	0
5781	42.4	4.82	459	7	3	0	0
5782	27.6	5.03	477	7	4	0	0
5783	32	4.96	465	8	5	0	0
5784	30.4	4.98	467	8	5	0	0
5785	36.1	4.69	438	8	5	0	0
5786	25.1	4.73	442	8	5	0	0
5787	31.5	4.74	442	7	6	0	0
5788	26.1	4.42	418.9	5.4	4.2	0	0
5789	44.3	4.00	374.5	4.2	5.7	0	0
5790	32.6	0.48	38.3	2.3	1.8	0	0
5791	35.9	0.84	79.4	1.3	0.6	0	0
5792	23.4	0.82	75	1.9	0.9	0	0
5793	11.8	0.65	64.8	0	0	0	0
5794	43.6	0.54	52.9	0.2	0.2	0	0
5795	37.8	0.62	59.7	0.6	0.5	0	0
5796	24.1	0.70	68.6	0.2	0.2	0	0
5797	32	0.77	74.8	0.5	0.4	0	0
5798	22	0.71	70.2	0.6	0	0	0
5799	16.3	0.68	67.6	0.4	0	0	0
5800	30	1.31	124	2	1	0	0
5801	65.5	2.85	269	3	2	1	0
5802	62.4	3.29	313	3	2	1	0
5803	81.6	2.30	223	2	1	0	0
5804	75.8	2.64	252	3	2	0	0
5805	88.6	3.87	370	4	3	0	0
5806	87	4.17	400	4	3	0	0
5807	84.7	6.23	595	6	4	1	0
5808	81.4	6.96	663	7	5	1	0
5809	90.5	7.14	681	7	5	1	0
5810	76.8	7.72	737	8	5	1	0
5811	83	8.02	767	8	5	1	0
5812	85	8.02	767	8	5	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5813	75	8.49	811	8	6	1	0
5814	80.2	8.81	844	9	5	1	0
5815	83.4	9.30	893	9	5	1	0
5816	75.3	7.66	731	8	5	1	0
5817	60	4.70	442	6	4	1	0
5818	50.1	4.35	404	6	5	1	0
5819	59.7	4.43	410	7	5	1	0
5820	65.8	4.53	420	7	5	1	0
5821	56.9	5.82	542	9	6	1	0
5822	61.6	6.72	627	10	7	1	0
5823	67	7.97	746	11	7	2	0
5824	76.7	8.22	773	10	7	2	0
5825	62.4	8.09	775	6	6	1	0
5826	91.2	8.24	793	8	5	0	0
5827	76.7	8.56	821	8	5	1	0
5828	78.2	9.03	868	8	5	1	0
5829	67.5	9.40	905	8	5	1	0
5830	74.3	9.93	958	8	5	1	0
5831	71.8	10.51	1014	9	5	1	0
5832	94.3	10.28	993	10	5	0	0
5833	66.5	10.08	970	10	6	0	0
5834	100.5	10.02	963	10	5	1	0
5835	73.3	10.22	987	10	5	0	0
5836	58.8	10.16	979	9	5	1	0
5837	57.8	9.90	953	9	5	1	0
5838	55.7	9.74	937	9	5	1	0
5839	75	9.71	934	9	5	1	0
5840	69.3	9.83	943	9	6	1	0
5841	78.9	9.86	947	10	5	1	0
5842	65.4	9.92	953	10	5	1	0
5843	61.5	10.11	972	10	5	1	0
5844	26.7	10.10	974	10	4	1	0
5845	64.1	10.09	973	10	4	1	0
5846	53.5	10.19	977	10	6	1	0
5847	53.5	10.16	974	10	6	1	0
5848	30.2	10.21	979	10	6	1	0
5849	53.2	10.30	988	10	6	1	0
5850	46.2	9.98	956	10	6	1	0
5851	52	10.37	995	10	6	1	0
5852	67	10.55	1013	10	6	1	0
5853	55.6	10.57	1017	11	6	0	0
5854	59.5	10.61	1019	10	6	1	0
5855	56.4	10.56	1014	10	6	1	0
5856	59.2	10.44	1002	10	6	1	0
5857	56.1	10.28	989	10	5	1	0
5858	65.1	10.23	981	10	6	1	0
5859	56.3	10.21	979	10	6	1	0
5860	64.1	10.30	988	10	6	1	0
5861	71.3	10.41	999	10	6	1	0
5862	74.4	10.57	1019	10	6	0	0
5863	59.2	10.65	1023	10	6	1	0
5864	68.2	10.62	1020	10	6	1	0
5865	79.7	10.62	1020	10	6	1	0
5866	68.8	10.36	994	10	6	1	0
5867	64.2	10.25	990	10	5	0	0
5868	74.6	9.88	957	8	5	0	0
5869	73.6	9.91	960	6	5	1	0
5870	64	10.25	985	9	6	1	0
5871	66.1	10.33	1004	7	5	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5872	72.2	10.44	1004	9	6	1	0
5873	51.2	10.37	1005	7	6	0	0
5874	69.1	10.42	1007	10	5	0	0
5875	72.3	10.51	1009	10	6	1	0
5876	62.8	10.52	1010	10	6	1	0
5877	71.3	10.39	995	11	6	1	0
5878	59.1	10.38	996	10	6	1	0
5879	70.3	10.34	996	10	6	0	0
5880	64.5	10.40	1002	10	6	0	0
5881	61.5	10.43	1001	10	6	1	0
5882	58.2	10.41	999	10	6	1	0
5883	26.4	10.47	1005	10	6	1	0
5884	66.8	10.76	1034	10	6	1	0
5885	60.7	10.76	1034	10	6	1	0
5886	50.2	9.43	899	13	6	0	0
5887	56.4	10.36	994	10	6	1	0
5888	61.5	10.73	1031	10	6	1	0
5889	55.9	10.70	1028	10	6	1	0
5890	48.1	10.52	1010	10	6	1	0
5891	47.5	10.36	992	11	6	1	0
5892	47.7	10.18	976	10	6	1	0
5893	56.9	10.33	987	12	6	1	0
5894	34.4	10.66	1020	12	6	1	0
5895	50.1	11.25	1081	11	6	1	0
5896	60.1	10.73	1031	10	6	1	0
5897	64	10.30	988	10	6	1	0
5898	62.2	10.06	964	10	6	1	0
5899	62.1	10.76	1032	11	6	1	0
5900	63.2	9.61	921	9	6	1	0
5901	67.7	6.79	649	7	4	1	0
5902	80	4.64	445	5	3	0	0
5903	59.3	4.21	400	6	3	0	0
5904	58.4	4.11	390	6	3	0	0
5905	42.7	3.23	300	7	3	0	0
5906	63.8	3.15	289	7	4	0	0
5907	78.1	7.50	715	8	5	1	0
5908	33.8	8.39	802	9	5	1	0
5909	61.4	8.83	846	9	5	1	0
5910	69	9.69	925	11	6	1	0
5911	63.3	9.64	921	9	7	1	0
5912	63.6	7.32	703	7	5	0	0
5913	64.3	3.52	340	3	2	0	0
5914	46.1	6.51	614	9	5	1	0
5915	38.7	6.03	570	9	5	0	0
5916	60.9	5.47	512	8	5	1	0
5917	74.5	5.47	512	8	5	1	0
5918	80.8	5.41	510	8	5	0	0
5919	47.6	7.40	695	12	7	0	0
5920	94	9.23	863	14	8	2	0
5921	72.9	10.35	972	14	9	2	0
5922	48.6	10.10	951	14	9	1	0
5923	54.6	6.91	662	7	5	0	0
5924	3.9	6.43	615	8	4	0	0
5925	17.6	5.33	509	6	4	0	0
5926	24.9	4.08	387	4	3	1	0
5927	20.7	4.08	387	4	3	1	0
5928	33.3	5.08	485	5	3	1	0
5929	24.5	5.42	523	5	3	0	0
5930	18.9	6.15	587	6	4	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5931	43.3	6.12	590	5	4	0	0
5932	31.5	6.12	590	5	4	0	0
5933	39.7	6.10	586	6	4	0	0
5934	33.3	6.38	612	7	4	0	0
5935	24.3	6.93	665	6	4	1	0
5936	38.2	6.94	664	7	4	1	0
5937	32.5	7.09	676	7	5	1	0
5938	4.2	5.14	488	5	4	1	0
5939	16.8	3.85	368	4	3	0	0
5940	19.7	4.99	471	6	4	1	0
5941	20.9	5.08	480	6	4	1	0
5942	25	5.49	515	7	5	0	1
5943	42.2	10.09	939	18	10	1	0
5944	80.8	10.58	988	18	10	1	0
5945	102.8	8.00	743	15	9	0	0
5946	49.7	8.00	743	15	9	0	0
5947	65.1	7.89	739	13	8	0	0
5948	54.9	7.61	718	11	7	0	0
5949	56.7	7.59	710	12	7	1	0
5950	41.1	7.71	726	10	7	1	0
5951	28.8	8.34	783	13	7	1	0
5952	44.6	8.58	811	11	7	1	0
5953	84	8.58	811	11	7	1	0
5954	45.1	8.34	789	10	7	1	0
5955	52.8	8.06	761	10	7	1	0
5956	41.2	7.92	747	10	7	1	0
5957	45.2	7.86	741	10	7	1	0
5958	55.9	7.56	716	9	6	1	0
5959	41.3	7.67	727	11	6	0	0
5960	24	7.56	714	10	6	1	0
5961	49.2	7.85	740	10	7	1	0
5962	50.5	7.84	744	9	6	1	0
5963	71.1	8.25	780	10	7	1	0
5964	45.7	8.49	808	10	7	0	0
5965	41.6	6.27	589	7	5	1	1
5966	20.7	4.68	441	5	4	0	1
5967	45.5	7.12	678	8	6	0	0
5968	46.7	8.41	794	11	7	1	0
5969	66.7	8.41	794	11	7	1	0
5970	51.7	8.69	826	11	7	0	0
5971	35.3	11.35	1076	14	9	1	0
5972	45.9	11.43	1081	14	10	1	0
5973	61.6	10.57	995	13	9	1	1
5974	32.7	10.48	991	13	9	1	0
5975	67.8	10.48	991	13	9	1	0
5976	46.6	10.26	968	13	9	0	1
5977	49.4	10.23	961	13	9	1	1
5978	46.8	10.38	981	13	9	1	0
5979	44.9	10.42	985	13	9	1	0
5980	49.2	10.25	968	13	9	1	0
5981	45.8	10.15	958	13	9	1	0
5982	45.8	10.15	958	13	9	1	0
5983	28	9.80	927	13	9	0	0
5984	40.9	9.68	909	14	9	1	0
5985	51.6	9.56	898	15	8	1	0
5986	45.8	10.18	959	14	9	1	0
5987	84.2	10.96	1034	14	10	1	0
5988	64.4	10.92	1030	14	10	1	0
5989	55.4	10.22	965	13	9	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5990	45.3	10.03	946	13	9	1	0
5991	90.5	11.53	1089	15	10	1	0
5992	50.2	11.64	1097	15	11	1	0
5993	56.4	8.38	794	10	8	0	0
5994	67.4	6.89	649	9	6	1	0
5995	74.6	5.70	541	7	5	0	0
5996	55.8	5.89	550	8	6	0	1
5997	72.6	5.94	560	8	6	0	0
5998	72.2	5.36	500	9	6	0	0
5999	57.7	5.66	520	9	8	1	0
6000	64.3	6.54	615	9	7	0	0
6001	64.2	8.77	822	12	9	1	0
6002	70.7	10.68	1010	14	10	0	0
6003	32.8	11.87	1120	15	11	1	0
6004	75.3	12.85	1215	17	12	0	0
6005	59.6	13.64	1280	18	13	1	1
6006	65.1	13.95	1316	18	13	1	0
6007	63.2	14.21	1337	19	14	1	0
6008	50.1	14.17	1331	19	13	1	1
6009	15.6	7.20	663	10	8	2	1
6010	96.3	6.95	649	9	8	1	0
6011	82.1	6.64	621	9	7	1	0
6012	74.2	6.70	625	10	7	1	0
6013	91.5	7.23	675	10	8	1	0
6014	69.9	7.91	738	11	9	1	0
6015	69.3	8.70	808	12	10	2	0
6016	58.9	9.92	923	14	11	2	0
6017	63.3	11.93	1111	16	14	2	0
6018	4.4	11.54	1090	15	10	1	0
6019	27.6	9.50	898	12	8	1	0
6020	27.2	7.61	718	9	7	1	0
6021	29.8	8.46	799	11	7	1	0
6022	29.7	9.62	910	12	8	1	0
6023	35.3	10.61	1004	13	9	1	0
6024	29.2	10.44	994	13	8	0	0
6025	28.7	9.99	945	13	8	1	0
6026	40.2	11.28	1062	16	10	1	0
6027	34.9	12.91	1213	19	12	1	0
6028	30.8	11.88	1117	17	11	1	0
6029	26.1	9.02	845	13	9	1	0
6030	28.2	8.11	761	11	8	1	0
6031	31.3	9.12	860	12	8	1	0
6032	29.7	9.65	906	14	9	1	0
6033	20.5	9.35	881	13	8	1	0
6034	21.7	9.24	869	12	9	1	0
6035	19.4	9.09	854	12	9	1	0
6036	2.8	10.16	937	16	13	2	0
6037	52.9	9.65	883	16	14	2	0
6038	26.1	8.60	788	14	12	2	0
6039	57	8.39	770	14	11	2	0
6040	73.2	8.69	795	14	11	2	1
6041	81.6	8.99	826	14	12	1	1
6042	66.1	9.61	888	14	12	1	1
6043	76.6	10.67	988	16	13	2	0
6044	82.9	10.95	1013	16	14	2	0
6045	91.5	10.28	955	15	13	1	0
6046	88.9	9.96	926	15	12	1	0
6047	74.1	10.25	955	15	12	1	0
6048	22	10.75	1005	15	12	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6049	122.2	11.40	1066	15	12	2	0
6050	75.8	11.93	1117	16	12	2	0
6051	71.1	11.96	1117	18	13	1	0
6052	60.7	12.54	1175	18	13	1	0
6053	48.1	13.08	1223	19	13	2	0
6054	37.6	13.43	1253	19	13	2	1
6055	112.6	13.47	1260	20	13	2	0
6056	95.6	12.33	1156	18	11	2	0
6057	122.3	11.35	1060	17	11	2	0
6058	41	10.93	1027	16	10	1	0
6059	91.8	10.98	1032	16	10	1	0
6060	83.8	11.27	1058	16	11	1	0
6061	49	11.37	1068	16	11	1	0
6062	72.5	10.73	1009	15	10	1	0
6063	78.6	10.55	990	15	10	0	1
6064	61.5	10.52	984	15	10	2	0
6065	91.1	10.95	1029	16	10	1	0
6066	58.1	10.25	960	16	11	0	0
6067	77.1	10.45	980	16	11	0	0
6068	62.2	10.87	1018	16	11	1	0
6069	87.9	10.87	1018	16	11	1	0
6070	59.4	10.84	1015	16	11	1	0
6071	55.3	10.82	1013	16	11	1	0
6072	11.7	10.86	1017	16	11	1	0
6073	70.5	11.05	1036	16	11	1	0
6074	73	11.12	1043	16	11	1	0
6075	68.2	11.01	1035	16	10	1	0
6076	58	10.81	1019	16	10	0	0
6077	59	10.80	1014	16	10	1	0
6078	59.5	11.08	1039	16	11	1	0
6079	58.1	11.84	1113	17	11	1	0
6080	49.1	13.71	1288	20	13	1	0
6081	68.7	14.67	1375	21	14	2	0
6082	56.6	14.51	1361	20	14	2	0
6083	76.6	14.00	1317	20	13	1	0
6084	54.4	13.74	1284	19	16	1	0
6085	87	14.89	1394	21	15	2	0
6086	60.2	17.46	1640	25	16	2	0
6087	74.3	12.27	1154	18	11	1	0
6088	54.5	5.95	564	8	5	0	0
6089	90.7	5.32	500	7	6	0	0
6090	61.8	4.82	450	7	6	0	0
6091	81.5	4.32	400	7	6	0	0
6092	72.1	3.84	350	8	6	0	0
6093	77.2	3.87	359	8	4	0	0
6094	54.1	5.38	502	9	6	0	0
6095	61.9	8.44	789	12	9	1	0
6096	77.5	13.17	1238	18	13	1	0
6097	60.7	14.37	1345	23	14	1	0
6098	49.2	14.97	1399	26	14	1	0
6099	70.9	16.50	1548	23	16	2	0
6100	54.7	17.18	1620	21	16	2	0
6101	67.2	17.41	1639	23	16	2	0
6102	52	8.28	765	14	9	2	0
6103	58.2	6.23	571	12	8	1	0
6104	59.5	5.84	533	11	7	2	0
6105	45.4	6.01	553	10	8	1	0
6106	31.9	5.44	496	10	8	1	0
6107	63.2	7.07	648	14	9	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6108	78.2	8.38	776	12	10	2	0
6109	65.6	9.06	846	13	10	1	0
6110	64	11.04	1017	20	13	2	0
6111	45.8	5.46	508	7	5	1	1
6112	35.2	4.60	429	6	5	1	0
6113	3.6	4.42	413	7	5	0	0
6114	20.8	4.57	424	7	5	1	0
6115	15.4	5.86	555	8	5	0	0
6116	23.9	5.94	559	8	5	1	0
6117	21.3	6.12	574	8	6	1	0
6118	26.6	6.50	612	8	6	1	0
6119	18.5	6.36	596	9	6	1	0
6120	16.5	6.39	603	9	6	0	0
6121	10	5.40	507	9	5	0	0
6122	23	6.37	593	11	6	1	0
6123	24.3	7.20	678	10	6	1	0
6124	22.5	7.20	678	10	6	1	0
6125	20.7	7.58	704	12	7	1	1
6126	20	7.63	697	12	11	1	1
6127	23.3	7.84	730	12	7	1	1
6128	29.9	13.86	1281	28	15	1	0
6129	112.1	13.86	1281	28	15	1	0
6130	74.8	14.29	1315	29	16	2	0
6131	85	13.67	1261	28	15	0	1
6132	74.5	13.67	1261	28	15	0	1
6133	63.7	11.10	1026	21	14	0	0
6134	70.8	11.28	1044	21	14	0	0
6135	60.3	11.69	1081	21	14	1	0
6136	73.6	11.73	1092	19	13	1	0
6137	56.4	11.73	1092	19	13	1	0
6138	74.7	11.54	1076	19	12	1	0
6139	67.6	11.46	1070	18	12	1	0
6140	74.8	11.43	1067	18	12	1	0
6141	63.7	11.46	1070	18	12	1	0
6142	68.7	11.72	1089	19	12	1	1
6143	64.9	11.91	1108	19	12	1	1
6144	62.8	11.92	1109	19	12	1	1
6145	61.2	11.85	1107	18	11	1	1
6146	44.9	11.75	1102	18	11	1	0
6147	60.6	11.82	1109	18	11	1	0
6148	70.8	11.86	1113	18	11	1	0
6149	53.3	11.94	1125	18	11	0	0
6150	56.9	11.83	1110	18	11	1	0
6151	48.3	11.67	1094	18	11	1	0
6152	49.9	11.67	1094	18	11	1	0
6153	72.3	12.42	1167	19	11	1	0
6154	84.1	12.42	1167	19	11	1	0
6155	83.7	12.63	1185	19	12	1	0
6156	71.8	12.63	1185	19	12	1	0
6157	74.6	12.85	1211	19	12	0	0
6158	59	12.95	1217	19	12	1	0
6159	73.2	13.28	1243	20	12	1	1
6160	80.9	13.50	1265	20	12	1	1
6161	65.1	13.48	1272	20	12	0	0
6162	96	13.59	1279	20	12	1	0
6163	82.4	13.61	1283	21	12	0	0
6164	80.1	13.63	1285	21	12	0	0
6165	60.1	13.81	1295	23	12	1	0
6166	70.5	13.88	1300	24	12	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6167	70.3	13.84	1304	20	12	1	0
6168	64.2	13.91	1311	20	12	1	0
6169	78.7	14.49	1367	21	12	1	0
6170	70.6	14.88	1404	22	12	1	0
6171	63.2	16.43	1553	23	13	0	1
6172	45.2	16.44	1549	26	13	1	0
6173	55.2	17.11	1605	30	14	1	0
6174	52.2	19.73	1853	34	16	1	0
6175	77.9	21.10	1981	37	17	1	0
6176	77.9	23.63	2220	41	19	1	0
6177	71.3	25.19	2363	44	20	2	0
6178	44.9	22.87	2160	32	18	1	1
6179	101.7	19.21	1809	29	15	1	1
6180	68.1	17.17	1611	30	14	1	0
6181	113.2	21.96	2061	40	17	1	0
6182	66.5	15.57	1480	25	9	0	0
6183	57.3	14.64	1380	27	10	0	0
6184	80.1	12.87	1206	24	11	0	0
6185	71.7	13.55	1267	26	12	0	0
6186	88.6	15.66	1464	30	14	0	0
6187	87.5	15.66	1464	30	14	0	0
6188	86.5	20.69	1933	39	18	1	0
6189	87.6	22.36	2095	40	19	1	0
6190	73.8	22.06	2066	41	18	1	0
6191	43	21.70	2028	40	18	2	0
6192	59	21.70	2028	40	18	2	0
6193	71	21.72	2029	40	18	1	1
6194	82	21.43	2005	40	18	1	0
6195	76	21.31	1990	40	19	1	0
6196	60	17.49	1633	32	16	1	0
6197	46.1	12.62	1172	22	14	1	0
6198	83	12.39	1154	21	13	1	0
6199	87.8	12.08	1121	20	13	2	0
6200	55.2	11.73	1092	19	13	1	0
6201	52	12.25	1142	20	13	1	0
6202	59	12.75	1190	21	13	1	0
6203	50.8	14.64	1367	24	15	1	0
6204	51.1	15.74	1470	26	16	1	0
6205	49.1	16.48	1538	27	16	2	0
6206	50.4	9.51	887	18	8	1	0
6207	12.5	8.11	760	15	7	0	0
6208	20.7	8.33	773	16	8	1	0
6209	20.4	8.65	805	16	8	1	0
6210	23.6	9.19	849	18	10	1	0
6211	12.1	10.22	953	19	9	1	0
6212	8.8	11.27	1049	22	10	1	0
6213	13.9	11.08	1027	22	11	1	0
6214	26.5	10.31	961	20	10	0	0
6215	19	9.57	889	17	10	1	0
6216	7	11.10	1039	19	11	0	0
6217	8.1	8.15	754	15	9	1	0
6218	19.1	7.78	722	14	8	1	0
6219	25.4	7.74	718	14	8	1	0
6220	28.6	8.07	757	13	8	0	0
6221	24.8	9.20	857	16	9	1	0
6222	23.2	10.16	943	17	10	1	1
6223	33.1	10.69	984	24	11	1	0
6224	7.9	15.01	1377	36	16	1	0
6225	46.8	18.52	1696	44	20	2	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6226	46.2	19.23	1763	46	20	2	0
6227	55.5	19.29	1766	48	21	1	0
6228	53.3	18.37	1681	46	20	1	0
6229	51.6	18.14	1658	46	20	1	0
6230	55.5	18.06	1646	46	20	2	0
6231	60.3	18.78	1715	48	21	1	0
6232	61.3	18.95	1732	48	21	1	0
6233	87.7	21.47	1966	54	23	1	0
6234	54.3	22.29	2034	56	23	1	2
6235	81.7	19.99	1814	55	25	0	0
6236	50.4	20.27	1852	48	25	1	0
6237	69.4	25.10	2299	62	26	1	1
6238	65.1	25.45	2335	62	26	2	0
6239	79.6	25.45	2335	62	26	2	0
6240	72.8	24.37	2240	59	25	1	0
6241	59.3	23.52	2158	57	24	2	0
6242	50.6	22.65	2080	54	23	2	0
6243	48.1	22.65	2080	54	23	2	0
6244	60.7	23.31	2143	56	24	1	0
6245	54.4	21.42	1966	51	22	2	0
6246	54.3	13.19	1220	30	13	0	0
6247	49.5	21.18	2034	25	10	1	0
6248	50.1	18.81	1814	20	9	0	0
6249	61.7	19.06	1852	15	8	0	0
6250	68.1	23.79	2299	22	12	0	0
6251	45.4	24.08	2335	20	11	0	0
6252	77.8	24.24	2335	25	13	0	0
6253	45.7	23.29	2240	25	13	0	0
6254	56.5	22.21	2158	16	9	1	0
6255	46.6	15.97	1448	39	21	2	0
6256	70	22.78	2081	49	29	3	0
6257	57.9	26.49	2419	56	34	4	0
6258	65.6	31.69	2892	67	41	5	0
6259	56.4	18.93	1735	37	24	3	0
6260	72.8	5.90	547	9	7	1	0
6261	68.7	4.42	415	6	5	0	0
6262	54.7	3.62	340	5	4	0	0
6263	67.5	3.37	315	5	4	0	0
6264	69.3	3.19	297	5	4	0	0
6265	69.1	3.11	294	4	3	0	0
6266	71.6	2.95	274	4	3	1	0
6267	81.2	2.95	278	4	3	0	0
6268	77.1	2.71	254	4	3	0	0
6269	77.9	2.72	255	4	3	0	0
6270	77.4	2.73	256	4	3	0	0
6271	69.6	2.69	248	4	3	1	0
6272	85.6	2.68	247	4	3	1	0
6273	89.1	2.56	244	3	2	0	0
6274	103.7	2.64	247	4	3	0	0
6275	153.7	2.39	227	3	2	0	0
6276	94.4	2.10	198	3	2	0	0
6277	89.6	2.41	219	4	3	0	1
6278	113.6	2.42	221	4	3	1	0
6279	112.3	2.33	217	3	2	1	0
6280	75.2	2.15	203	3	2	0	0
6281	78.5	1.99	187	3	2	0	0
6282	95.5	1.95	183	3	2	0	0
6283	90.7	1.92	180	3	2	0	0
6284	78	2.07	195	3	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6285	65.4	2.15	203	3	2	0	0
6286	84.6	2.93	272	6	3	0	0
6287	64.1	2.01	189	3	2	0	0
6288	70.5	2.01	189	3	2	0	0
6289	70.5	2.01	189	3	2	0	0
6290	59.7	1.87	177	2	2	0	0
6291	45	1.75	159	3	2	1	0
6292	52.9	1.84	160	3	3	1	1
6293	43.1	1.39	121	4	2	1	0
6294	58.2	1.39	121	4	2	1	0
6295	79.9	1.35	121	4	2	0	0
6296	48	1.35	117	4	2	1	0
6297	60.3	1.31	117	4	2	0	0
6298	50	1.31	117	4	2	0	0
6299	53.8	1.23	114	3	1	0	0
6300	53.8	1.13	104	3	1	0	0
6301	15	0.96	87	3	1	0	0
6302	25	1.03	94	3	1	0	0
6303	16	0.99	81	3	1	1	1
6304	13.7	0.99	81	3	1	1	1
6305	18.7	0.99	85	3	1	0	1
6306	18.7	1.00	88	3	2	0	0
6307	18.7	1.00	88	3	2	0	0
6308	18.7	1.00	88	3	2	0	0
6309	7.1	1.04	95	3	1	0	0
6310	15.5	1.10	98	3	2	0	0
6311	9.7	1.10	98	3	2	0	0
6312	18.4	1.18	98	3	3	0	1
6313	12.2	1.28	107	4	3	1	0
6314	14.8	1.54	130	6	4	0	0
6315	29.2	1.44	120	6	4	0	0
6316	31	1.54	130	6	4	0	0
6317	30	1.54	130	6	4	0	0
6318	25	1.12	89	3	3	2	0
6319	17.5	7.58	632	24	18	6	0
6320	15	5.29	446	11	12	5	1
6321	15.4	5.81	495	12	12	4	2
6322	13.6	7.00	608	14	13	5	1
6323	21	6.91	602	15	14	3	1
6324	18.4	12.55	1077	30	27	8	1
6325	108	13.13	1125	32	29	8	1
6326	116.6	13.13	1125	32	29	8	1
6327	99.1	11.93	1007	30	28	8	2
6328	73.3	10.02	840	26	24	7	2
6329	78.6	10.47	887	26	25	7	1
MOGOLLON Fm.							
6330	141.2	10.68	910	25	25	7	1
6331	119.6	11.39	973	27	25	8	1
6332	109.6	11.78	1016	27	25	7	1
6333	111.5	11.78	1016	27	25	7	1
6334	103	13.03	1137	28	26	8	0
6335	102.3	14.22	1229	31	28	8	3
6336	115.5	14.22	1229	31	28	8	3
6337	83.1	12.17	1058	27	24	7	1
6338	78.6	11.86	1026	27	26	7	0
6339	63.9	7.31	629	17	16	5	0
6340	79.6	5.11	431	14	12	4	0
6341	61.4	6.24	550	15	12	2	0
6342	69.3	6.33	560	16	11	2	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6343	67.9	6.50	575	17	11	2	0
6344	67.5	6.78	600	17	12	2	0
6345	47.5	16.30	1423	38	30	9	1
6346	47.1	8.46	732	18	16	5	2
6347	64	22.82	2016	51	40	11	0
6348	79.7	23.26	2055	51	40	11	1
6349	84.5	22.53	1992	50	39	11	0
6350	111.4	23.41	2054	52	40	12	3
6351	85.7	22.33	1952	50	39	11	4
6352	124.7	21.37	1863	48	38	11	4
6353	98.9	20.68	1796	47	38	11	4
6354	69.7	21.29	1843	50	41	12	3
6355	71.3	23.29	2019	55	46	13	2
6356	64.7	24.27	2094	56	48	13	5
6357	103.4	34.06	2968	77	62	17	6
6358	71.7	37.73	3298	83	66	19	7
6359	83.8	37.84	3311	82	66	19	7
6360	69.9	17.21	1505	42	30	8	2
6361	105.2	16.49	1442	39	31	9	0
6362	92.9	21.43	1891	49	38	10	0
6363	69.6	23.12	2046	50	39	11	1
6364	69.3	6.66	574	13	11	7	1
6365	84.3	6.89	600	14	11	7	0
6366	84.3	10.64	950	22	14	7	0
6367	82.3	10.96	965	23	15	10	0
6368	102.1	11.11	975	24	16	10	0
6369	103	11.01	975	22	14	10	0
6370	118.7	11.54	1010	22	20	10	0
6371	78.4	14.01	1156	37	34	11	5
6372	118.5	39.70	3275	106	98	31	13
6373	70.7	52.09	4330	140	124	38	15
6374	64.1	84.67	6798	250	237	77	30
6375	52.4	95.08	7586	284	273	90	35
6376	93.4	124.77	9796	396	377	127	50
6377	83.4	109.70	8654	350	323	108	43
6378	75.2	97.88	7824	288	280	92	36
6379	70.3	82.06	6615	267	217	69	26
6380	45.2	58.00	4736	202	156	48	0
6381	85.4	50.73	4237	163	122	36	0
6382	74.1	45.29	3784	137	100	29	11
6383	69.9	41.00	3490	93	90	26	10
6384	102.1	40.23	3427	91	88	25	10
6385	90	38.73	3301	87	84	24	10
6386	89.1	38.25	3261	87	83	24	9
6387	92.8	38.25	3261	87	83	24	9
6388	36.6	978.28	74052	2939	3720	1197	390
6389	79.3	978.28	74052	2939	3720	1197	390
6390	34.3	320.36	25682	927	1016	268	76
6391	101.8	259.62	20865	750	815	213	60
6392	53.1	113.26	9233	323	335	83	22
6393	70.2	69.42	5691	195	200	49	13
6394	78.4	37.49	3087	101	104	27	8
6395	76.8	37.49	3087	101	104	27	8
6396	60.4	33.57	2773	89	90	24	8
6397	69.7	32.81	2717	87	86	23	8
6398	66.2	31.05	2562	111	79	21	0
6399	2.6	12.59	1081	31	28	8	0
6400	15.2	9.27	773	28	22	8	0
6401	16.7	9.90	821	24	23	8	4

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6402	13.7	10.04	841	23	22	9	3
6403	8.2	46.64	4235	85	58	15	5
6404	10.4	17.53	1481	36	38	14	6
6405	11.8	12.50	960	32	38	18	8
6406	10.8	15.66	1242	46	40	18	8
6407	15.1	13.47	1067	33	37	17	7
6408	11.3	12.93	1044	38	32	13	5
6409	14.4	13.54	1125	36	28	12	5
6410	9.6	15.03	1273	36	30	12	4
6411	13.8	15.98	1400	32	28	10	2
6412	13.1	15.73	1358	37	27	10	4
6413	20.8	16.54	1424	40	30	10	4
6414	10	19.46	1621	59	42	14	5
6415	13.8	21.21	1737	70	50	16	6
6416	16.8	19.07	1561	59	46	15	6
6417	16	20.88	1721	63	49	16	6
6418	9	19.62	1605	62	48	16	5
6419	14.7	16.84	1376	51	40	14	6
6420	23.6	13.33	974	67	51	18	0
6421	9.7	29.61	2469	85	63	22	9
6422	19	44.71	3621	143	111	39	15
6423	18.8	76.09	6094	263	201	64	26
6424	19.5	70.78	5738	251	184	59	10
6425	23.3	59.67	4892	201	147	48	8
6426	20.2	63.40	5154	213	165	55	9
6427	3.7	73.86	5875	278	214	67	9
6428	36.3	63.84	5054	244	187	59	9
6429	82.5	70.53	5687	238	196	63	10
6430	88.7	65.30	5284	223	177	56	9
6431	94.6	60.07	4880	208	157	50	8
6432	158.7	60.07	4880	208	157	50	8
6433	230.6	52.81	4327	169	135	44	7
6434	156.5	49.17	4050	149	125	41	6
6435	174.1	44.34	3675	130	110	36	5
6436	216.8	42.71	3550	124	104	34	5
6437	289	42.71	3550	124	104	34	5
6438	146.7	43.17	3629	119	99	32	5
6439	146	43.38	3655	118	98	32	5
6440	90.6	43.38	3655	118	98	32	5
6441	104	48.68	4149	130	102	32	5
6442	153.2	29.19	2489	78	61	19	3
6443	173.9	29.65	2550	75	60	15	5
6444	153.1	14.33	1069	64	49	16	5
6445	119.2	70.63	5343	321	247	78	5
6446	101.8	78.11	6020	334	258	81	5
6447	122.9	108.55	8727	387	303	95	13
6448	142.1	115.49	9336	402	316	99	13
6449	141.4	143.29	11771	464	365	115	15
6450	116.4	148.90	12179	511	379	118	16
6451	151.4	153.07	12484	546	389	121	16
6452	122.4	153.07	12484	546	389	121	16
6453	119	135.96	11168	461	340	104	14
6454	124.8	106.97	8897	335	256	78	10
6455	114.6	89.19	7467	273	206	62	8
6456	111.7	89.19	7467	273	206	62	8
6457	127.9	83.14	7032	247	179	54	7
6458	123.6	83.14	7032	247	179	54	7
6459	123.3	83.72	7104	245	177	53	7
6460	195.7	84.97	7250	243	174	51	7

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6461	155.9	81.56	6961	235	166	48	7
6462	135.4	86.28	7322	254	182	53	8
6463	73.3	87.85	7442	261	187	55	8
6464	71.1	78.76	6685	233	166	48	7
6465	98.3	29.40	2498	87	62	18	2
6466	122.3	18.85	1605	55	39	12	1
6467	114.2	24.00	2045	69	49	15	2
6468	76.5	38.21	3281	107	76	22	2
6469	119.5	38.88	3355	106	74	21	3
6470	166.1	38.24	3300	105	73	20	3
6471	98.6	37.24	3200	105	73	20	3
6472	85.6	37.77	3250	107	74	19	3
6473	80.3	38.56	3330	108	73	19	3
6474	84.2	33.56	2850	100	73	18	3
6475	58	34.36	2941	100	65	20	4
6476	68.4	20.10	1723	56	37	11	4
6477	71.1	12.58	1070	34	24	7	4
6478	114.1	10.76	914	29	20	6	4
6479	68.4	33.39	2877	92	62	18	4
6480	86.3	36.50	3143	104	68	20	3
6481	84.3	40.23	3460	115	75	22	4
6482	82.7	40.23	3460	115	75	22	4
6483	29.7	640.49	49676	2649	2059	627	78
6484	83.2	585.32	45712	2447	1843	524	60
6485	105	189.21	15004	761	559	154	20
6486	105	123.88	9853	488	360	102	14
6487	123.2	107.55	8565	420	310	89	13
6488	80	75.23	6025	282	210	63	10
6489	56.1	69.05	5543	242	193	62	10
6490	60.4	70.14	5600	237	202	68	12
6491	50.9	29.31	1613	244	191	65	0
6492	49.9	65.83	5356	210	177	57	9
6493	3.6	36.73	3020	116	92	30	5
6495	6.4	17.69	1462	51	43	16	3
6496	12.1	15.83	1311	46	38	14	2
6497	0.8	16.80	1288	59	51	24	5
6498	25.9	18.42	1384	70	60	27	6
6499	8.1	18.71	1451	70	56	23	4
6500	14.2	12.70	1020	40	33	14	3
6501	9.7	13.95	1144	43	33	14	2
6502	10.5	14.34	1156	46	37	15	3
6503	12.7	14.90	1224	44	36	15	2
6504	13.3	12.96	1032	43	36	15	2
6505	13.2	9.70	705	42	36	17	1
6506	12	13.93	1094	42	38	19	5
6507	14.5	14.45	1142	44	40	20	3
6508	14.9	11.72	883	41	35	18	6
6509	15	12.06	916	44	35	18	5
6510	14.4	14.16	1118	47	37	17	5
6511	5	12.11	948	42	33	15	4
6512	7	10.75	845	38	29	13	3
6513	15.3	11.46	911	38	29	13	4
6514	5.7	8.52	668	28	23	11	3
6515	11.8	9.57	767	30	24	12	2
6516	17.7	7.38	583	26	21	10	0
6517	9.9	8.33	676	26	20	10	1
6518	16.7	8.31	669	26	20	10	2
6519	10.5	10.32	804	39	31	13	1
6520	4.8	9.74	752	36	29	12	3

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6521	185.3	10.74	844	35	31	13	3
6522	88	10.74	844	35	31	13	3
6523	102.4	15.28	1232	52	39	15	3
6524	49.7	19.00	1567	57	45	16	4
6525	81.1	8.35	518	57	45	17	0
6526	66	11.81	883	54	42	16	0
6527	80.8	15.78	1303	50	38	14	1
6528	62.6	15.77	1309	47	36	14	2
6529	89.3	15.76	1316	44	35	13	3
6530	89.9	15.03	1258	43	34	13	1
6531	104.8	15.01	1256	42	33	13	2
6532	78	15.01	1256	42	33	13	2
6533	72.1	15.13	1261	43	33	13	3
6534	102.6	15.89	1324	48	34	13	3
6535	59.8	15.78	1320	47	34	13	2
6536	62.5	15.41	1306	42	33	13	0
6537	61.8	16.10	1357	42	34	13	3
6538	77.8	16.18	1360	42	34	13	4
6539	84.5	16.19	1359	49	35	13	1
6540	80.5	16.12	1354	48	35	13	1
6541	94.7	15.44	1299	43	34	13	1
6542	87.2	14.45	1216	39	31	12	2
6543	88.9	14.06	1187	38	30	12	1
6544	84.3	13.92	1178	37	29	12	1
6545	85.5	13.71	1159	35	28	12	2
6546	87	17.76	1517	44	35	14	2
6547	89.7	19.08	1636	48	37	15	1
6548	77.5	16.91	1453	39	31	13	3
6549	73.5	13.43	1171	29	23	10	1
6550	66.7	12.15	957	46	35	14	1
6551	64.4	14.38	1229	36	28	12	1
6552	82.3	5.51	500	8	6	3	1
6553	78.3	5.46	485	10	8	3	1
6554	99.1	6.83	592	15	12	5	1
6555	97.9	6.84	600	15	11	4	1
6556	91.6	7.35	650	14	12	4	1
6557	94.1	7.78	685	15	14	4	1
6558	89.9	8.51	755	16	13	5	1
6559	137.1	8.92	789	18	14	5	1
6560	101.4	8.98	795	18	14	5	1
6561	123.8	9.08	800	19	15	5	1
6562	113.5	9.84	858	21	17	7	1
6563	124.7	17.07	1443	43	34	14	4
6564	61	20.89	1756	58	43	17	4
6565	68.9	19.82	1678	56	41	16	1
6566	81.5	19.82	1678	56	41	16	1
6567	73.7	18.19	1458	67	50	18	1
6568	68.1	16.02	1320	52	39	14	1
6569	70.5	19.31	1606	60	42	16	3
6570	61.1	20.81	1747	61	43	17	3
6571	77.6	21.34	1806	60	43	16	3
6572	58.7	20.22	1712	56	41	15	3
6573	42.5	20.46	1729	57	41	15	4
6574	58.2	16.93	1430	47	34	13	3
6575	60.4	12.57	1000	45	33	12	4
6576	58.7	16.02	1350	44	32	12	4
6577	48.4	403.22	32259	1674	1116	338	3
6578	57	50.21	3887	222	153	54	3
6579	59.9	43.11	3244	181	141	53	14

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6580	63.2	33.20	2440	141	122	48	8
6581	78.5	22.59	1495	130	107	42	3
6582	85.2	25.31	1863	109	90	35	8
6583	85.3	18.74	1250	98	89	34	5
6584	98.9	19.13	1300	99	86	33	5
6585	77.7	20.67	1450	100	88	32	5
6586	1.8	3.80	280	17	14	5	0
6587	16.9	6.67	481	32	26	10	1
6588	18	30.41	1851	143	136	87	29
6589	15	21.16	1339	96	89	56	19
6590	19	17.62	1133	80	72	44	15
6591	34.2	16.92	1086	77	70	43	15
6592	28.1	49.65	3597	197	179	82	22
6593	25.9	15.25	980	64	61	40	15
6594	47.8	14.28	906	59	58	39	15
6595	15.1	13.83	881	55	55	38	15
6596	6.2	13.39	856	51	52	37	15
6597	15.9	8.61	489	49	47	34	0
6598	15	11.38	746	40	42	30	13
6599	11.6	7.49	440	42	40	26	0
6600	8	8.60	535	41	39	26	5
6601	9	9.70	630	40	37	25	10
6602	10.5	11.53	795	40	40	26	11
6603	10.9	15.79	1155	54	50	28	11
6604	9.8	16.50	1187	65	59	30	7
6605	4.8	15.89	1130	68	58	29	7
6606	6.6	9.77	722	36	31	19	3
6607	10.7	10.02	735	34	30	18	8
6608	11.2	12.61	905	53	45	23	5
6609	11.4	18.35	1390	61	54	27	10
6610	5.8	17.28	1217	78	68	30	6
6611	79.2	15.13	1008	80	71	31	3
6612	68.1	20.40	1483	81	72	32	10
6613	84.6	20.54	1549	72	64	29	10
6614	82.4	19.89	1505	69	61	28	10
6615	93.1	19.46	1482	66	58	27	10
6616	81.8	18.77	1448	61	53	25	10
6617	70.9	18.52	1443	58	50	24	9
6618	95.3	19.41	1522	60	51	24	10
6619	67.5	24.16	1901	77	64	29	11
6620	71.5	34.49	2727	115	93	38	12
6621	67.2	42.39	3376	142	114	44	13
6622	74.9	43.56	3496	142	113	44	13
6623	68.9	51.00	4084	168	134	51	15
6624	69.6	86.78	6859	301	246	91	23
6625	77.8	102.80	8100	361	297	110	26
6626	121	158.23	12326	579	482	176	38
6627	95	193.26	15000	715	601	217	45
6628	88	251.07	19415	939	801	284	55
6629	87.3	282.87	21821	1067	914	322	60
6630	79.9	312.25	24020	1184	1021	361	67
6631	87.2	385.12	29269	1510	1301	472	86
6632	95.6	368.07	27238	1598	1366	497	58
6633	94.4	346.12	23610	1891	1545	564	66
6634	50.3	444.13	33129	1866	1585	576	99
6635	60.6	463.09	34601	1924	1646	600	105
6636	125.5	476.00	35466	1986	1701	628	109
6637	56.7	118.62	8800	523	422	151	30
6638	89.9	103.01	7649	455	366	129	26

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6639	88.6	56.83	3610	366	294	105	8
6640	76.9	37.64	1878	338	272	99	0
6641	53.8	124.97	9107	573	472	173	27
6642	30.6	85.96	6478	353	293	108	20
6643	21.6	79.00	5886	341	276	101	20
6644	30.1	94.94	7059	402	338	124	24
6645	26.9	79.88	5902	341	289	107	22
6646	79.9	72.51	5363	305	263	97	20
6647	76	82.63	6213	356	280	99	20
6648	78.2	99.74	7580	424	327	114	22
6649	87.5	128.12	9758	545	414	145	28
6650	66.1	126.21	8429	736	615	219	0
6651	52.3	341.81	26112	1329	1144	407	70
6652	62.1	352.27	26743	1378	1209	431	75
6653	66.8	292.08	22008	1169	1028	366	63
6654	79.6	271.77	20480	1086	957	340	59
6655	71.3	223.33	16846	889	786	277	48
6656	92.1	151.55	11471	599	527	184	34
6657	70.3	112.97	8479	485	391	136	26
6658	76.2	87.40	6551	356	310	110	21
6659	89.8	23.13	1699	106	86	31	4
6660	49.4	50.85	3724	232	187	67	13
6661	61.6	76.39	5611	333	284	102	21
6662	54.9	0.62	40	4	3	1	0
6663	55	0.55	34	3	2	1	1
6664	63.2	2.33	164	11	9	4	1
6665	79.3	40.37	2961	181	146	54	12
6666	71.8	63.36	4759	253	223	80	16
6667	71.8	62.85	4731	263	215	77	15
6668	60.4	60.04	4551	232	206	74	15
6669	48.7	62.70	4686	272	216	78	16
6670	45	40.34	2974	156	140	62	16
6671	63.9	35.18	2568	133	124	58	16
6672	42.4	37.04	2734	136	126	60	16
6673	55	29.47	2167	111	102	48	12
6674	34	39.80	2910	150	143	64	17
6675	37.1	22.55	1672	84	78	34	9
6676	60.7	38.56	2884	140	131	56	15
6677	65.3	38.37	2887	137	127	55	15
6678	81	38.02	2890	132	122	53	14
6679	62.3	37.28	2854	126	116	51	14
6680	69.8	35.62	2741	120	108	48	13
6681	53.1	22.65	1540	116	103	46	0
6682	50.9	31.26	2358	114	100	45	12
6683	51	32.94	2542	111	98	44	12
6684	62.6	33.02	2571	109	95	42	12
6685	57.7	32.03	2488	106	93	41	12
6686	41.6	31.20	2424	104	91	40	11
6687	67.9	30.42	2360	102	89	39	11
6688	60	29.03	2242	98	86	38	11
6689	46.4	28.47	2200	96	84	37	11
6690	44.5	27.70	2137	94	82	36	11
6691	49.9	25.77	1998	87	76	33	9
6692	51.7	25.66	1992	86	75	33	9
6693	52.7	25.58	1991	86	74	32	9
6694	39.1	25.67	2000	86	74	32	9
6695	76.8	25.58	1998	86	73	31	9
6696	50.9	26.92	2123	89	74	31	9
6697	92.4	28.80	2286	97	77	31	9

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6698	67.7	22.98	1725	102	79	33	0
6699	30.5	22.48	1689	85	72	32	9
6700	89.6	11.12	831	43	37	16	4
6701	84.8	11.48	856	44	37	17	5
6702	81.3	16.39	1243	61	49	23	7
6703	79.1	18.94	1456	70	54	24	8
6704	79.1	21.47	1668	79	59	26	8
6705	43.6	8.54	495	62	49	22	0
6706	75.7	8.54	495	62	49	22	0
6707	62.9	16.11	1185	74	58	26	0
6708	40.8	24.01	1846	88	70	31	9
6709	32.4	29.46	2358	91	75	34	9
6710	33.7	27.36	2183	85	70	32	9
6711	33.7	25.32	1997	80	67	31	10
6712	33.7	25.32	1997	80	67	31	10
6713	23.5	23.82	1864	77	65	31	9
6714	57	23.45	1824	76	65	31	10
6715	80.3	24.59	1931	79	67	31	9
6716	69	33.77	2693	111	88	37	10
6717	81.6	55.91	4461	202	147	55	13
6718	70.5	92.09	7345	331	252	89	18
6719	67.2	145.73	11457	574	418	146	26
6720	55.1	222.47	17285	863	686	242	42
6721	55.4	324.43	24793	1295	1066	383	66
6722	58.7	333.38	25442	1335	1102	395	68
6723	77.5	358.68	27242	1469	1205	427	73
6724	71.1	354.67	26805	1514	1197	422	71
6725	61.4	216.30	14316	1346	1054	365	0
6726	80.5	211.39	15418	950	821	282	46
6727	61.9	174.71	13036	796	612	208	35
6728	78.6	149.42	11304	628	512	174	30
6729	57.6	136.75	10438	544	462	157	27
6730	73.1	94.93	7191	390	323	112	21
6731	55.1	87.84	6692	351	294	102	20
6732	81.3	80.93	6221	313	264	91	18
6733	61.2	78.75	6074	301	254	88	17
6734	35.8	88.52	6924	325	272	93	18
6735	112.6	37.02	2614	186	159	56	3
6736	66.2	27.91	1867	158	136	50	0
6737	51.9	35.25	2689	135	116	42	10
6738	35.6	32.88	2545	120	102	38	9
6739	58	32.76	2559	115	98	37	9
6740	61.1	29.13	2290	100	85	32	8
6741	43.4	29.26	2614	110	18	7	2
6742	83.7	21.86	1867	120	15	6	2
6743	87.4	29.86	2689	108	14	6	3
6744	78.4	28.40	2545	107	14	6	3
6745	101.7	28.59	2559	108	15	6	3
6746	91	25.95	2290	112	14	6	3
6747	94.6	25.50	2245	112	14	6	3
6748	80.4	26.50	2335	117	14	6	3
6749	59	30.73	2635	139	31	13	3
6750	42.6	22.02	1558	175	59	23	5
6751	30.1	26.28	1994	134	73	28	7
6752	43.8	52.37	4281	174	129	44	9
6753	43.8	68.94	5667	225	166	56	11
6754	49.9	96.85	7993	316	230	75	14
6755	64.1	112.90	9340	358	269	88	15
6756	42.8	128.63	10606	412	312	103	17

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6757	87.2	161.09	13117	540	415	138	23
6758	54.8	186.83	15012	657	511	171	28
6759	81.4	206.71	16421	752	594	201	32
6760	56.3	222.90	17564	830	662	225	36
6761	101.1	211.72	16598	808	640	217	34
6762	68.7	169.46	13343	638	504	170	27
6763	80.7	160.12	12601	608	475	160	26
6764	85.4	124.96	9818	490	367	123	21
6765	76	90.14	7047	362	273	90	13
6766	42.6	54.58	4186	230	183	62	3
6767	25	73.20	5957	237	189	65	13
6768	85.8	90.81	7399	293	234	80	15
6769	106	126.50	10193	426	344	117	21
6770	99.2	147.82	11829	512	415	141	24
6771	109.1	148.74	11857	523	426	143	24
6772	98.1	159.27	12681	562	458	154	26
6773	76.1	225.75	17649	820	699	245	41
6774	90.4	291.49	22218	1119	983	359	61
6775	8.2	112.22	8698	433	349	124	23
6776	15.7	63.67	4965	232	197	69	14
6777	10	55.56	4218	220	186	69	13
6778	7.4	63.04	4839	256	196	73	15
6779	10.1	82.25	6343	330	255	93	17
6780	9.6	93.25	7145	371	300	110	20
6781	9.7	58.64	4330	255	206	81	17
6782	17.6	40.96	2941	183	154	64	15
6783	21.4	36.86	2646	165	139	58	13
6784	20	38.23	2752	169	143	59	13
6785	18.7	33.74	2449	146	123	51	12
6786	19.7	29.01	2037	141	117	49	7
6787	28.3	31.20	2294	132	109	45	11
6788	8.2	29.18	2150	122	101	43	10
6789	19.3	27.05	1992	112	93	40	10
6790	16.5	27.17	2002	113	94	40	10
6791	6.3	26.31	1901	109	99	42	10
6792	6.5	27.41	1927	124	110	45	11
6793	15.6	19.50	1343	91	80	35	9
6794	12.3	21.98	1641	83	73	32	9
6795	12.5	20.67	1547	77	67	31	8
6796	9.1	20.54	1531	76	68	31	8
6797	9.2	22.53	1617	99	85	35	8
6798	13.7	18.36	1332	79	66	28	7
6799	18.2	19.00	1432	73	61	26	7
6800	17.4	20.19	1483	87	71	29	7
6801	52.4	21.16	1500	102	83	32	7
6802	62.7	22.33	1577	111	90	33	7
6803	93.6	24.14	1830	100	80	29	6
6804	61.2	29.39	2304	110	86	31	7
6805	62.5	31.50	2478	119	89	33	7
6806	77.7	30.89	2424	116	89	33	7
6807	50.9	28.60	2238	104	84	32	7
6808	46.9	25.56	1992	93	76	30	7
6809	47.7	24.93	1946	89	73	29	7
6810	43.4	24.43	1914	85	71	28	7
6811	61.1	24.30	1914	83	69	28	7
6812	46.6	26.42	2090	89	74	29	7
6813	87.1	44.64	3499	160	131	50	11
6814	78.7	63.22	4928	235	190	70	15
6815	147.7	89.44	6946	343	274	99	19

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6816	87.2	113.53	8847	436	346	122	22
6817	180.2	121.56	9481	467	371	129	22
6818	103.2	135.05	10552	531	407	139	23
6819	128.8	144.04	11266	574	430	145	24
6820	113.8	96.14	6277	617	477	161	6
6821	186.4	80.17	4613	631	492	167	0
6822	98	148.85	10824	728	566	191	29
6823	153.5	148.85	10824	728	566	191	29
6824	121.4	173.26	13031	767	598	203	31
6825	120.1	222.09	17446	844	664	227	35
6826	114	230.41	18069	879	693	238	37
6827	46.1	250.44	19556	964	767	264	41
6828	29.5	280.76	21753	1096	886	308	48
6829	37.7	302.87	23237	1205	989	349	55
6830	147.8	283.18	21708	1134	928	326	51
6831	48.8	275.49	21131	1103	901	316	50
6832	48.8	259.20	19868	1036	853	297	47
6833	48.8	242.90	18605	970	805	279	44
6834	66.7	234.60	17865	955	787	276	44
6835	149.7	240.70	18317	980	809	285	45
6836	106.6	262.66	19931	1084	888	314	49
6837	92.3	269.38	20389	1128	915	324	51
6838	102	268.11	20267	1098	930	326	51
6839	79.2	275.27	20815	1128	952	335	52
6840	96.2	339.35	25597	1400	1178	420	65
6841	73.1	467.20	35009	1947	1661	593	92
6842	59.6	487.98	36560	2047	1731	618	95
6843	86.9	443.88	33253	1864	1572	565	87
6844	58.4	175.52	13112	742	628	226	34
6845	106.3	154.02	10231	911	748	270	5
6846	66.4	239.92	16286	1357	1100	392	25
6847	53.2	288.54	20609	1438	1149	402	63
6848	66.4	314.84	23269	1435	1146	399	62
6849	67.2	350.52	26227	1536	1230	431	68
6850	116.7	399.57	29874	1752	1405	494	78
6851	34	417.37	31374	1705	1489	521	80
6852	60.6	428.92	32009	1888	1518	535	83
6853	59.8	398.66	29777	1655	1446	511	80
6854	51.4	367.66	27283	1636	1326	468	73
6855	71	354.66	26318	1582	1279	450	70
6856	88.3	292.27	21691	1311	1054	368	56
6857	62	263.72	19555	1190	954	330	51
6858	68.5	179.18	13297	799	645	227	36
6859	29.7	49.40	3668	200	174	70	14
6860	40.1	39.35	2843	164	149	63	13
6861	55.4	37.36	2674	157	145	62	13
6862	76.2	38.45	2751	160	148	65	14
6863	67.1	40.54	2937	163	151	67	14
6864	66.6	42.18	3085	165	152	68	15
6865	48.5	44.58	3302	170	155	69	15
6866	39.8	47.49	3556	176	159	71	16
6867	50.3	48.36	3632	176	160	73	16
6868	36.2	61.46	4500	231	210	106	26
6869	55.1	65.94	4448	276	269	148	39
6870	77.7	65.94	4448	276	269	148	39
6871	74.8	52.06	3800	198	180	90	22
6872	71.8	52.06	3800	198	180	90	22
6873	39.6	41.66	3088	162	138	65	16
6874	62.1	44.59	3340	171	143	67	16

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6875	41.8	45.69	3431	174	146	68	16
6876	63.8	46.69	3522	178	148	68	15
6877	75.7	60.47	4561	241	194	83	18
6878	64.8	63.84	4847	236	209	87	18
6879	52.7	57.87	4336	234	190	82	17
6880	61.2	54.98	4151	213	176	77	17
6881	55	54.98	4151	213	176	77	17
6882	57.6	52.56	3991	191	169	74	16
6883	59.5	51.38	3911	180	165	73	16
6884	128.1	41.92	3097	155	146	68	15
6885	41.1	47.08	3615	154	146	68	15
6886	45.6	39.22	3002	127	123	58	13
6887	64.2	39.24	3002	125	122	59	14
6888	73.5	39.24	3002	125	122	59	14
6889	68.8	39.58	3051	125	120	58	13
6890	58.8	41.17	3227	125	117	56	13
6891	73.1	40.75	3197	124	115	55	13
6892	60.5	39.93	3129	122	113	54	13
6893	51.9	38.72	3029	118	110	53	13
6894	60.7	37.45	2921	116	108	52	12
6895	80.7	37.04	2885	115	107	52	12
6896	61.6	36.26	2821	115	105	50	12
6897	88.2	36.66	2866	116	104	49	12
6898	61.8	36.66	2866	116	104	49	12
6899	68.6	37.45	2934	120	105	49	12
6900	62.7	37.47	2952	120	104	47	11
6901	90.2	37.14	2924	121	103	46	11
6902	58.6	29.13	2133	123	101	44	11
6903	77.7	34.97	2722	125	101	43	10
6904	72	37.84	3009	127	101	42	10
6905	96.1	38.83	3113	126	100	42	10
6906	64.9	37.55	3007	122	98	40	10
6907	60.2	36.76	2942	118	96	40	10
6908	38.5	35.80	2855	115	95	40	10
6909	55.5	35.45	2827	113	94	40	10
6910	57.1	34.68	2776	109	91	39	9
6911	52.3	35.55	2868	110	90	38	9
6912	54	36.74	2980	112	91	38	9
6913	42.6	37.58	3063	114	90	38	9
6914	54.2	37.39	3052	112	90	37	9
6915	55.8	37.16	3044	110	88	37	8
6916	55.2	30.28	2382	107	86	36	6
6917	39.6	17.44	1107	106	85	35	6
6918	38.7	33.82	2730	106	85	35	9
6919	51.4	35.74	2918	107	86	36	8
6920	69.4	36.23	2938	111	90	37	9
6921	63.5	40.44	3285	127	100	40	9
6922	103.1	46.65	3794	150	115	44	10
6923	56	52.82	4302	169	132	49	10
6924	70.7	54.12	4413	175	133	50	10
6925	65	49.71	4076	154	119	45	10
6926	52.2	47.46	3895	145	113	43	10
6927	64.9	44.06	3628	132	103	40	9
6928	77.4	44.62	3700	129	101	39	9
6929	42.2	51.50	4292	147	114	43	10
6930	59.3	59.80	4982	177	131	49	11
6931	59.1	61.30	5110	182	135	49	11
6932	74.1	60.10	5004	178	133	49	11
6933	61.3	57.01	4739	164	129	48	11

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6934	62.7	58.13	4829	170	131	49	11
6935	62.5	58.07	4848	167	126	48	11
6936	73.4	55.18	4632	151	118	45	10
6937	100.9	53.62	4512	143	114	43	10
6938	68.3	42.07	3366	145	113	43	8
6939	71.7	46.02	3751	147	113	42	10
6940	69.6	47.59	3910	146	113	42	10
6941	54.1	52.07	4363	145	112	42	10
6942	71.8	51.51	4312	144	111	42	10
6943	79.3	32.61	2721	92	71	27	7
6944	82.3	23.34	1946	65	51	20	5
6945	61	32.10	2682	89	69	27	7
6946	55.5	39.43	3306	107	82	33	9
6947	64.2	15.54	1277	41	33	14	8
6948	76	14.63	1200	39	31	13	8
6949	63.6	13.98	1150	37	29	13	7
6950	58.7	16.13	1350	38	32	14	7
6951	49.3	22.81	1875	63	52	21	8
6952	39.5	82.41	6827	242	193	69	15
6953	24.3	129.33	10533	412	332	115	24
6954	16.6	129.33	10533	412	332	115	24
6955	32.4	84.59	6833	293	227	71	15
6956	64.7	68.36	5536	234	180	58	12
6957	90	66.91	5426	228	175	56	12
6958	40.5	61.11	4985	203	155	50	11
6959	53.8	60.07	4943	192	146	48	10
6960	54.8	62.60	5206	189	143	48	11
6961	53	58.45	4888	173	130	44	9
6962	57.7	50.11	4218	142	107	37	8
6963	50.9	45.55	3828	128	97	35	8
6964	59.5	80.25	6643	243	193	63	13
6965	55.7	67.79	5602	206	163	54	12
6966	26	62.35	5138	193	152	50	11
6967	7.6	43.33	3535	137	109	38	9
6968	18.7	30.44	2472	90	76	31	8
6969	2.1	26.48	2069	87	76	33	9
6970	9.7	27.29	2148	88	76	33	9
6971	1.2	25.94	2043	87	71	31	8
6972	15	24.73	1953	78	68	30	8
6973	10.3	24.27	1936	76	64	28	7
6974	14.7	25.00	2019	76	62	27	7
6975	17.8	23.72	1892	74	63	27	7
6976	19	25.94	2107	76	64	27	7
6977	19.5	26.22	2139	76	64	26	7
6978	19.3	29.68	2453	86	68	26	7
6979	16.8	29.68	2453	86	68	26	7
6980	20.2	29.34	2431	86	67	25	6
6981	21.6	29.07	2414	86	65	24	6
6982	31.7	26.01	2148	80	62	23	3
6983	35.8	28.11	2339	82	62	23	6
6984	20.1	29.45	2452	86	65	24	6
6985	27.9	30.23	2523	88	66	24	6
6986	25	28.53	2376	83	63	23	6
6987	26	28.06	2309	87	67	23	6
6988	17.7	41.47	3373	151	106	31	6
6989	73.8	35.52	2881	128	91	28	6
6990	45.4	31.98	2608	110	80	25	6
6991	103.5	31.98	2608	110	80	25	6
6992	107.1	30.50	2502	100	74	24	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6993	81.6	29.69	2448	96	69	23	6
6994	79.5	29.52	2439	97	67	22	6
6995	73.5	29.09	2428	89	63	21	6
6996	108.8	29.09	2428	89	63	21	6
6997	97	29.39	2467	87	63	21	5
6998	29.7	34.22	2854	104	75	25	7
6999	83.2	46.94	3947	146	100	30	7
7000	104	46.94	3947	146	100	30	7
7001	48.8	41.02	3465	126	85	25	6
7002	48.8	36.92	3111	117	75	23	6
7003	64	25.11	1986	106	70	22	3
7004	64.2	23.62	1890	94	63	20	3
7005	69.6	31.07	2618	93	63	21	6
7006	56.8	31.78	2692	94	63	21	5
7007	69.3	31.78	2692	94	63	21	5
7008	60.2	32.60	2771	94	64	21	5
7009	51.1	35.47	3029	100	68	21	6
7010	44.6	33.98	2902	96	65	21	5
7011	47.1	33.24	2823	96	65	21	6
7012	39	32.77	2799	96	64	21	2
7013	20.7	32.35	2758	93	62	20	5
7014	38	29.10	2467	86	58	18	5
7015	37.8	28.12	2376	84	57	18	5
7016	40.9	29.61	2480	95	62	20	5
7017	54.9	29.61	2480	95	62	20	5
7018	39.2	29.71	2515	87	62	19	4
7019	60.4	19.84	1515	90	63	20	4
7020	87.7	28.78	2450	83	58	17	4
7021	75	28.27	2395	82	57	18	5
7022	43.9	29.04	2472	82	57	18	5
7023	42.4	29.30	2500	82	58	18	4
7024	63.1	30.42	2611	84	59	19	2
7025	56.2	31.84	2736	86	60	19	4
7026	36.9	33.04	2850	87	61	18	5
7027	43.4	32.13	2760	86	60	19	5
7028	75	31.53	2705	85	59	19	5
7029	79.4	31.46	2698	85	59	19	5
7030	30.6	31.53	2712	85	58	18	5
7031	32.7	30.01	2558	86	60	19	3
7032	36.4	29.62	2479	94	65	20	4
7033	39.1	34.80	2954	102	71	21	5
7034	31.8	33.74	2855	100	70	21	5
7035	48.3	32.67	2764	97	68	20	5
7036	72.6	25.92	2195	76	54	17	3
7037	52.6	20.75	1700	65	50	20	3
7038	81.4	20.32	1650	65	51	21	3
7039	66.9	19.78	1600	68	49	20	3
7040	74.2	17.98	1450	60	47	18	3
7041	54.8	15.75	1295	45	40	15	2
7042	66.7	11.59	951	35	24	14	2
7043	42.3	26.48	2235	80	55	17	4
7044	53.8	30.72	2610	90	62	19	4
7045	38.3	30.34	2579	88	61	19	4
7046	54.5	28.74	2456	79	56	18	4
7047	59.4	28.74	2456	79	56	18	4
7048	47	27.64	2412	59	52	17	2
7049	0.9	20.79	1757	56	45	15	3
7050	80.3	17.36	1430	54	42	13	4
7051	64.7	17.71	1474	54	41	14	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7052	53.4	18.21	1545	51	39	13	1
7053	69.4	18.54	1592	49	37	12	1
7054	85.4	19.63	1699	50	37	12	1
7055	56.5	21.75	1892	54	39	12	2
7056	74.7	29.61	2549	75	55	18	5
7057	64.4	39.23	3328	104	80	28	7
7058	63.5	36.16	3063	96	74	26	7
7059	87.2	29.56	2516	79	59	20	5
7060	71.3	27.00	2309	72	53	17	4
7061	65.1	23.89	2070	65	44	13	1
7062	64.3	24.20	2087	67	44	13	3
7063	55	24.68	2121	71	46	13	3
7064	72.8	24.11	2057	73	47	13	3
7065	62.3	24.48	2094	73	47	13	3
7066	70.2	25.05	2149	74	47	13	3
7067	57.1	26.04	2246	77	47	12	3
7068	56.4	27.82	2411	83	49	12	2
7069	68.8	28.44	2461	85	50	12	3
7070	78.9	28.71	2484	86	51	13	2
7071	62.1	33.43	2871	106	62	16	2
7072	32.4	169.86	13930	665	412	100	18
7073	29.2	543.53	44223	2195	1385	330	53
7074	61.1	278.96	22884	1110	680	158	24
7075	68.7	169.87	14005	667	399	94	15
7076	75.4	146.49	12109	571	339	79	13
7077	70.9	96.58	8034	370	216	49	8
7078	31.9	33.28	2714	143	81	20	1
7079	55.9	31.30	2600	118	69	18	3
7080	56.1	28.96	2446	102	57	15	3
7081	42.3	28.31	2410	92	54	15	3
7082	65.5	28.15	2409	88	53	14	3
7083	42.5	30.38	2610	98	54	15	2
7084	52.2	33.02	2836	106	60	16	2
7085	73.2	38.42	3287	123	71	19	4
7086	54.3	52.08	4433	181	99	24	4
7087	58.8	53.39	4542	189	101	24	4
7088	64.3	44.33	3815	144	80	20	2
7089	70.3	36.44	3147	111	64	17	3
7090	64.7	35.99	3105	111	63	17	3
7091	57.2	35.25	3032	108	63	17	4
7092	65.3	37.52	3207	127	68	18	3
7093	77.1	37.52	3207	127	68	18	3
7094	60.1	16.18	1085	124	71	18	0
7095	61.3	26.34	2128	117	68	17	0
7096	40.7	31.31	2636	112	66	17	1
7097	74.6	31.71	2704	104	62	17	1
7098	49.3	32.34	2759	105	64	17	1
7099	64.7	30.52	2598	99	61	17	1
7100	69.2	29.04	2460	100	58	15	2
7101	67.5	28.44	2417	92	56	15	3
7102	41.4	27.77	2356	92	54	15	3
7103	62.3	27.87	2370	90	54	15	3
7104	62	28.88	2453	93	58	15	3
7105	82.9	29.74	2521	97	60	16	3
7106	85.4	29.74	2521	97	60	16	3
7107	58.9	29.86	2525	103	60	15	3
7108	57.2	36.75	3104	125	75	19	4
7109	48.5	41.15	3475	142	84	21	4
7110	51.9	39.42	3334	134	80	20	4

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7111	62	35.39	2988	123	71	18	4
7112	54.1	24.10	1926	105	67	17	1
7113	32.6	23.61	1893	101	66	17	0
7114	49.5	30.63	2592	100	66	17	1
7115	60.2	31.07	2643	96	63	17	3
7116	45.4	31.82	2706	99	65	17	3
7117	49.6	30.73	2616	96	62	16	3
7118	49.5	30.59	2609	94	61	16	3
7119	54.8	31.39	2680	95	62	17	3
7120	58.1	34.99	3002	102	67	18	4
7121	53.9	33.54	2886	97	64	18	2
7122	57.3	30.83	2663	86	58	16	2
7123	51.5	29.73	2567	81	55	16	3
7124	40.1	29.77	2575	80	56	16	2
7125	28.2	27.26	2206	103	72	22	2
7126	35.3	24.94	2000	97	70	20	2
7127	64.7	23.99	2004	74	53	17	4
7128	77.6	7.47	614	24	17	6	2
7129	92.6	11.06	900	35	30	9	2
7130	76.8	11.98	985	38	29	10	2
7131	61.5	12.23	999	45	28	10	2
7132	56.1	13.32	1093	45	34	8	3
7133	59.4	26.65	2197	87	63	20	5
7134	66.6	36.23	3014	116	84	25	5
7135	56.5	33.75	2654	144	101	30	2
7136	59.1	34.46	2698	147	103	30	5
7137	79.6	39.19	3223	139	95	27	5
7138	76.9	38.34	3204	126	86	25	4
7139	67.9	36.09	3028	116	79	23	4
7140	51.1	35.18	2949	113	77	23	4
7141	48.5	32.64	2738	106	72	22	2
7142	0.8	32.64	2738	106	72	22	2
7143	76.3	57.39	4962	164	107	27	4
7144	86	33.08	2827	99	67	18	2
7145	62.6	25.15	2106	81	56	16	3
7146	62	14.24	1079	69	49	15	0
7147	41.9	20.22	1669	67	48	15	3
7148	89.7	22.37	1900	66	48	14	1
7149	81.6	24.15	2067	68	49	15	1
7150	101.8	24.15	2067	68	49	15	1
7151	64.2	29.45	2504	83	61	18	4
7152	54.1	44.36	3712	131	101	31	7
7153	68.6	49.36	4094	147	117	38	9
7154	47.1	40.85	3424	117	92	29	7
7155	66.4	32.03	2740	89	63	19	4
7156	36.2	30.67	2642	86	58	16	3
7157	51.3	30.56	2638	86	57	15	3
7158	54.5	29.61	2560	85	55	14	2
7159	73.7	27.52	2379	77	51	14	2
7160	53.7	26.95	2340	72	48	13	3
7161	28.4	19.71	1596	78	53	15	0
7162	48	21.03	1705	83	56	16	0
7163	50.6	34.96	3027	92	63	19	4
7164	44.5	43.36	3795	110	74	21	3
7165	34.9	41.99	3672	106	72	21	3
7166	40.8	44.36	3857	115	79	23	4
7167	74	44.32	3850	115	80	23	4
7168	65.5	43.35	3756	115	79	23	4
7169	53.7	41.56	3593	112	77	22	4

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7170	51.7	42.66	3680	118	81	23	3
7171	50.5	43.26	3739	120	82	24	1
7172	71.1	42.42	3658	115	79	23	5
7173	60.4	42.02	3663	108	73	21	4
7174	63.3	44.91	3927	117	79	22	1
7175	55.7	44.91	3927	117	79	22	1
7176	61.6	44.30	3872	111	76	22	4
7177	51.9	33.02	2773	93	77	23	4
7178	67.1	40.34	3347	140	97	29	0
7179	72.5	60.15	5122	175	123	36	6
7180	81.4	63.76	5472	179	124	36	6
7181	85.1	61.26	5288	168	115	33	5
7182	114.2	61.26	5288	168	115	33	5
7183	87.4	56.96	4931	154	104	30	5
7184	74.9	56.35	4909	144	99	29	5
7185	91.9	56.35	4909	144	99	29	5
7186	84.9	58.50	5124	144	99	29	5
7187	88.2	58.31	5180	113	96	28	5
7188	76.4	60.59	5387	117	99	29	5
7189	67.8	64.10	5667	128	110	33	5
7190	77.7	63.61	5555	158	111	33	5
7191	74	63.61	5555	158	111	33	5
7192	69.4	54.65	4791	118	99	29	5
7193	62.1	54.65	4791	118	99	29	5
7194	63.7	50.43	4350	137	94	28	5
7195	53.4	50.02	4309	137	94	28	5
7196	63.6	51.07	4404	136	98	28	5
7197	82.1	20.42	1380	136	94	27	0
7198	72.6	25.34	1872	136	94	27	0
7199	64.8	35.11	2855	135	94	26	0
7200	64.2	47.74	4088	140	94	26	4
7201	64.3	52.25	4501	147	99	27	5
7202	52.4	53.55	4620	150	101	28	4
7203	57.1	55.41	4805	150	105	29	1
7204	68.1	56.53	4885	157	106	29	4
7205	77.8	57.17	4948	158	107	28	4
7206	74.6	57.42	4960	162	107	28	5
7207	45.2	54.71	4744	154	100	26	3
7208	43	53.08	4606	147	96	25	4
7209	39.3	51.42	4464	141	92	25	4
7210	34.8	39.99	3470	108	71	20	4
7211	34.1	34.29	2989	92	61	17	1
7212	44	32.71	2847	87	59	17	1
7213	75.4	31.02	2691	83	57	16	2
7214	66.5	30.55	2646	81	56	16	3
7215	14.7	30.50	2640	80	57	16	3
7216	73.5	26.47	2205	89	62	17	2
7217	83.7	30.84	2598	98	66	18	4
7218	58.9	34.76	2988	100	67	18	3
7219	51.8	37.69	3258	104	69	19	4
7220	73.3	38.87	3377	108	71	19	1
7221	46.5	28.20	2464	76	49	13	1
7222	62.7	36.46	3177	96	63	17	4
7223	69.4	31.19	2723	83	55	15	1
7224	68.1	6.97	608	19	13	3	0
7225	40.2	23.64	2068	64	42	8	2
7226	52.1	18.76	1629	51	33	9	2
7227	49.7	17.32	1500	48	30	9	2
7228	56.1	16.29	1400	45	31	9	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7229	47.2	14.62	1245	42	29	9	2
7230	43	17.98	1543	50	35	10	2
7231	49.2	23.89	2066	65	45	12	2
7232	56.7	25.83	2235	70	47	13	3
7233	67.2	32.43	2818	87	59	16	2
7234	73.2	42.28	3686	112	76	20	2
7235	56.1	46.82	4065	125	85	23	4
7236	46.8	23.30	2019	62	43	12	2
7237	50.6	30.17	2612	82	57	15	2
7238	0.2	57.87	5028	160	105	26	4
7239	69.8	69.10	5903	204	140	37	6
7240	116.5	65.53	5575	197	136	37	6
7241	66.4	53.52	4587	157	106	28	5
7242	59	40.31	3448	117	80	22	4
7243	76.4	37.47	3188	109	77	22	4
7244	130.5	44.96	3822	128	98	31	0
7245	87.5	40.35	3316	131	102	33	3
7246	126.4	33.45	2557	137	110	36	8
7247	122.4	33.45	2557	137	110	36	8
7248	37.7	25.45	2114	82	60	18	3
7249	19.6	29.21	2502	78	57	18	4
7250	9.2	33.02	2828	89	67	20	3
7251	8	32.17	2682	96	74	24	5
7252	11.5	39.19	3296	114	86	28	5
7253	12.7	34.21	2791	116	87	28	5
7254	16	39.02	3301	113	82	26	5
7255	20.1	39.78	3380	115	81	25	5
7256	17.4	36.05	3088	97	70	22	5
7257	12.6	36.74	3144	100	74	22	4
7258	18.8	44.20	3788	123	87	25	5
7259	13.7	45.29	3897	124	88	25	4
7260	47.2	40.52	3443	121	85	23	4
7261	88.1	36.97	3135	110	78	22	4
7262	64.7	36.23	3074	107	77	21	4
7263	65.4	20.08	1583	85	61	18	0
7264	64.7	27.76	2397	76	54	15	1
7265	59.7	27.76	2397	76	54	15	1
7266	69.3	37.49	3249	99	69	20	3
7267	92	38.42	3335	101	70	20	3
7268	79.8	39.03	3392	101	71	19	4
7269	97.6	36.12	3139	94	66	18	3
7270	87.5	36.69	3204	94	67	19	0
7271	64.1	38.57	3357	101	71	20	1
7272	100.9	39.67	3438	104	74	21	3
7273	66.6	41.22	3560	110	78	22	4
7274	85.8	41.22	3560	110	78	22	4
7275	77.2	43.10	3708	117	84	24	4
7276	61.2	51.26	4390	142	104	30	4
7277	85.9	89.08	7602	248	188	54	6
7278	80.1	162.19	13768	453	356	103	13
7279	103	207.41	17474	596	475	140	18
7280	102.5	207.41	17474	596	475	140	18
7281	75.8	219.64	18339	655	529	157	20
7282	84.9	223.92	18531	693	563	169	22
7283	95.4	203.35	16785	642	517	155	19
7284	81.7	194.56	16062	615	494	148	18
7285	81.7	159.36	13171	509	400	118	15
7286	64.1	140.90	11504	485	374	111	10
7287	65.2	103.95	8170	436	323	96	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7288	88	130.20	10828	418	311	92	11
7289	82.3	143.69	12004	448	335	101	12
7290	110.5	145.88	12194	452	339	102	13
7291	61	152.19	12728	469	353	106	14
7292	140.4	155.18	12962	482	362	109	14
7293	121.6	155.18	12962	482	362	109	14
7294	89.2	157.46	13102	495	376	114	14
7295	126.1	162.38	13450	509	401	123	15
7296	113	163.64	13536	512	408	125	16
7297	144.3	163.64	13536	512	408	125	16
7298	93.2	159.65	13160	520	399	122	16
7299	95.3	156.63	12922	510	390	119	15
7300	52.3	144.87	11968	471	357	109	14
7301	85.6	144.92	12044	463	347	104	13
7302	79.4	141.50	11773	453	337	100	12
7303	97.5	133.82	11147	429	315	93	12
7304	81.7	131.85	10983	422	310	92	12
7305	73.2	111.78	9321	358	261	77	10
7306	82.9	104.20	8708	330	241	71	9
7307	91.3	89.15	7484	276	201	59	8
7308	67.5	89.81	7580	274	191	55	12
7309	81.3	74.80	6071	279	194	56	9
7310	62.3	44.34	2988	289	208	61	0
7311	78.6	35.90	3040	106	77	23	3
7312	81.3	76.94	6557	224	158	45	7
7313	64.8	91.60	7838	263	183	53	7
7314	77.1	87.99	7588	240	168	48	7
7315	75.6	56.01	4916	129	100	28	3
7316	54.6	36.65	3132	124	74	12	3
7317	84.7	27.07	2187	123	72	12	2
7318	79.9	26.84	2164	123	72	12	2
7319	102.1	26.82	2162	123	72	12	2
7320	95.5	26.70	2156	120	72	12	2
7321	143.9	28.48	2316	129	72	12	2
7322	85.5	82.44	7190	204	148	43	6
7323	93.5	82.44	7190	204	148	43	6
7324	76.4	113.27	10029	229	195	55	7
7325	79.3	81.96	6700	306	216	59	0
7326	60	110.32	9446	323	227	61	3
7327	67.3	148.14	13108	346	241	64	7
7328	55.6	167.06	14939	358	249	66	8
7329	61.6	167.06	14939	358	249	66	8
7330	68.4	132.86	11793	296	211	57	8
7331	62.2	129.15	11446	290	207	57	8
7332	77.5	119.84	10620	269	193	53	7
7333	39.2	119.84	10620	269	193	53	7
7334	232.2	136.35	13108	118	65	24	0
7335	102.2	154.62	14939	116	65	24	0
7336	84.5	154.34	14939	117	55	24	0
7337	77.4	122.90	11793	118	55	24	0
7338	53.5	119.35	11446	114	55	24	0
7339	71.4	110.73	10620	114	43	24	0
7340	69.9	110.79	10620	117	43	24	0
7341	77.6	135.12	13108	111	30	23	0
7342	77.5	153.43	14939	111	30	23	0
7343	57.9	153.77	14939	113	40	23	0
7344	70.5	122.38	11793	114	40	23	1
7345	70.5	118.94	11446	114	41	23	1
7346	70.5	110.68	10620	114	41	23	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7347	52.3	110.72	10620	119	39	23	1
7348	70.2	79.13	7504	100	39	23	0
7349	42.3	77.50	7324	110	38	23	0
7350	195.2	100.14	8317	317	244	69	11
7351	16.3	59.46	5399	120	70	23	1
7352	16	25.50	2303	52	31	10	2
7353	15.7	24.35	2198	56	25	10	2
7354	17.6	23.58	2184	33	25	7	1
7355	10.1	36.23	3056	93	80	29	5
7356	11.7	39.48	3334	99	86	32	6
7357	25.8	28.19	2630	21	18	17	5
7358	26.3	29.45	2730	24	22	19	5
7359	17.9	13.00	1083	35	31	11	2
7360	14.7	12.58	1058	32	29	11	1
7361	37.6	12.58	1058	32	29	11	1
7362	29.2	11.82	995	33	27	10	0
7363	17.1	12.53	1054	35	28	10	1
7364	30.2	12.53	1054	35	28	10	1
7365	27.2	18.37	1665	30	21	11	1
7366	46.9	19.10	1620	51	39	14	3
7367	19.2	17.87	1509	48	38	14	3
7368	46.9	17.52	1473	48	39	14	2
7369	42.6	18.14	1521	51	41	14	2
7370	107.2	16.13	1349	44	37	13	3
7371	98.9	15.83	1330	42	35	13	2
7372	101	16.38	1397	42	35	13	0
7373	104	16.47	1405	42	34	13	1
7374	94.6	16.82	1439	41	33	12	3
7375	142.3	17.11	1466	42	34	12	3
7376	112.7	17.60	1517	40	34	13	2
7377	170.5	18.57	1618	36	35	13	1
7378	133.3	18.57	1618	36	35	13	1
7379	134.8	20.10	1738	49	38	14	1
7380	85.7	21.07	1828	50	40	14	0
7381	77.8	23.02	2008	54	42	15	0
7382	86.1	19.43	1639	56	43	15	0
7383	79.8	18.88	1578	58	44	15	0
7384	105.3	22.53	1941	59	44	15	0
7385	80.6	25.20	2197	60	45	16	1
7386	78.3	25.49	2224	60	46	16	1
7387	124.2	27.38	2387	65	49	17	2
7388	112.2	30.42	2637	74	56	18	3
7389	124.4	32.27	2792	79	60	20	3
7390	125.9	37.82	3258	95	73	24	4
7391	122.3	40.87	3521	104	79	25	4
7392	120.3	43.46	3753	111	83	26	4
7393	96.9	42.54	3690	106	78	24	5
7394	102.8	42.54	3690	106	78	24	5
7395	102.1	43.19	3765	104	77	24	4
7396	85.2	43.35	3784	104	76	24	4
7397	102.3	37.77	3294	91	66	21	4
7398	91.4	32.60	2840	78	58	18	3
7399	63.6	28.76	2500	70	51	17	3
7400	103.7	27.63	2397	67	50	17	3
7401	61.7	27.57	2387	67	50	17	3
7402	81.4	28.12	2439	68	51	17	3
7403	87.3	22.03	1908	54	41	14	2
7404	80.9	8.86	766	21	17	6	1
7405	77.4	9.41	788	28	22	7	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7406	118.3	9.97	810	35	27	9	0
7407	87.5	13.46	1086	48	36	12	2
7408	111.7	16.96	1363	60	45	15	3
7409	107.7	20.58	1724	63	46	15	2
7410	109	21.79	1844	64	47	15	1
7411	84.8	25.35	2209	55	47	16	2
7412	102.8	26.00	2260	62	48	16	2
7413	76.3	25.89	2251	61	48	16	2
7414	115.1	25.12	2188	55	47	16	3
7415	89.2	24.63	2141	54	47	15	3
7416	108.3	24.50	2129	54	47	15	3
7417	97.1	24.42	2121	53	46	15	3
7418	107.8	24.08	2087	56	46	15	3
7419	64	24.02	2070	64	46	15	1
7420	31.7	26.18	2250	72	51	16	2
7421	60	29.66	2542	80	58	18	3
7422	87.1	29.86	2561	79	59	18	3
7423	77.1	28.80	2457	80	58	18	3
7424	52	27.49	2343	75	56	18	3
7425	94.9	27.49	2343	75	56	18	3
7426	94.3	26.00	2208	73	54	17	3
7427	93.5	21.64	1827	61	47	15	3
7428	40	8.12	624	32	26	10	2
7429	55.7	7.77	608	28	23	9	2
7430	63.1	12.35	1018	37	30	11	2
7431	100.8	17.36	1430	53	43	15	3
7432	92.5	29.26	2401	98	74	25	2
7433	72.7	40.38	3312	133	103	33	4
7434	77.9	40.09	3300	128	100	32	5
7435	56	30.71	2554	91	73	24	4
7436	52	27.80	2344	77	61	20	3
7437	81.5	27.80	2344	77	61	20	3
7438	37.9	37.17	3125	98	81	30	7
7439	81.3	34.48	2909	88	74	28	6
7440	70.4	25.80	2219	57	51	19	4
7441	62.1	20.48	1800	38	36	13	2
7442	58.2	20.01	1768	37	34	11	3
7443	51.8	22.79	2025	43	36	12	3
7444	50.7	27.32	2442	53	42	13	1
7445	38.4	31.33	2729	73	58	17	3
7446	30.8	42.06	3765	77	65	19	3
7447	29.6	34.98	3095	73	58	17	3
7448	50.1	28.87	2526	69	51	16	1
7449	108.6	26.64	2316	67	49	15	2
7450	52.3	29.81	2583	76	55	17	2
7451	57.6	42.77	3688	114	82	25	3
7452	69.1	67.98	5840	184	135	40	6
7453	57.5	71.76	6176	192	141	42	6
7454	87.7	70.75	6092	189	138	41	6
7455	70.5	64.73	5572	173	126	37	5
7456	67.4	52.58	4537	140	105	31	1
7457	63.1	41.61	3560	113	85	26	4
7458	98.6	34.85	2969	97	72	22	3
7459	71.5	32.75	2792	89	68	21	3
7460	49.4	30.13	2571	83	63	19	2
7461	38.1	24.20	2039	73	55	16	1
7462	70.3	20.61	1724	64	48	15	1
7463	68.6	21.27	1800	62	47	14	1
7464	41.2	20.91	1776	59	44	14	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7465	59.9	20.11	1708	56	42	13	2
7466	80.4	19.10	1624	54	40	12	2
7467	78.4	17.71	1512	50	37	11	1
7468	63.1	17.61	1502	50	36	11	1
7469	61.6	17.54	1497	49	36	11	1
7470	53.1	17.79	1520	50	36	11	1
7471	67.3	18.54	1590	51	37	11	1
7472	76.6	18.54	1590	51	37	11	1
7473	84.4	18.63	1597	52	37	11	1
7474	76.7	19.16	1643	53	38	12	2
7475	87.9	19.72	1695	54	39	12	1
7476	84.1	20.22	1738	56	40	12	1
7477	46.7	20.55	1766	56	40	12	2
7478	73.6	20.28	1734	56	41	12	2
7479	78.7	20.34	1739	55	41	13	2
7480	68.6	20.39	1743	55	41	13	2
7481	82.7	18.59	1565	55	41	13	2
7482	85.2	14.60	1178	53	39	12	2
7483	71.3	19.15	1651	50	37	12	1
7484	82.6	20.10	1741	50	38	12	1
7485	109.2	20.30	1759	51	38	12	2
7486	85.6	20.90	1815	51	38	12	2
7487	92.2	22.12	1927	54	39	12	2
7488	65.2	23.71	2064	59	42	13	2
7489	60.9	15.63	1358	39	28	9	1
7490	70.7	7.91	683	20	15	5	1
7491	60.3	10.96	946	28	20	7	1
7492	64	12.69	1098	33	23	8	1
7493	61.2	18.35	1591	47	34	11	1
7494	79.2	19.65	1700	50	36	12	2
7495	58.5	19.53	1688	51	36	11	2
7496	91.2	19.46	1682	51	36	11	2
7497	101.8	18.47	1599	48	35	11	1
7498	86.5	18.56	1603	49	35	11	2
7499	83.3	18.44	1591	48	34	11	2
7500	64.2	18.21	1577	48	34	10	1
7501	105.7	19.16	1662	50	35	11	1
7502	95.4	19.14	1661	50	35	11	1
7503	81.1	19.07	1655	50	35	11	1
7504	76.4	19.03	1653	50	35	11	0
7505	91.3	15.96	1352	49	35	11	0
7506	76.2	13.93	1151	49	35	11	0
7507	65	18.04	1541	51	36	11	2
7508	137.2	20.57	1784	54	37	11	2
7509	87	20.55	1784	54	36	11	2
7510	67.1	20.42	1773	53	36	11	2
7511	101.5	20.93	1816	55	37	12	2
7512	81.3	21.29	1849	55	38	11	2
7513	56.6	21.60	1878	55	39	11	2
7514	84.5	21.99	1910	56	39	12	3
7515	80.1	21.37	1857	55	38	12	2
7516	62.6	21.00	1827	54	37	11	2
7517	77.6	21.36	1872	48	38	11	2
7518	95.3	21.51	1889	46	38	11	2
7519	100	20.75	1815	52	37	10	1
7520	64.6	22.39	1968	51	39	11	2
7521	110.2	23.22	2044	50	40	12	2
7522	35	13.39	864	65	58	34	7
7523	96.7	16.27	1002	78	77	47	10

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7524	77	10.93	641	58	55	34	7
7525	55.3	15.46	882	85	80	51	10
7526	36.3	26.27	1533	135	133	85	17
7527	28.2	30.59	1753	175	155	99	19
7528	23.5	51.03	2716	285	275	193	44
7529	54.3	64.40	3270	370	354	262	64
7530	34.9	64.08	3126	375	358	277	70
7531	53.8	35.18	1945	200	182	123	27
7532	71.1	31.92	1857	168	156	104	23
7533	59.8	32.74	1980	164	152	100	22
7534	63.8	16.43	990	85	76	50	11
7535	67.9	33.19	2082	155	146	96	21
7536	73.9	32.06	2068	145	135	87	19
7537	74.6	29.23	1826	139	131	84	18
7538	77.3	27.85	1705	136	130	82	18
7539	39.9	27.59	1864	112	108	68	15
7540	52.7	27.06	1857	110	101	64	14
7541	79.2	33.10	2308	129	120	76	16
7542	80.6	34.23	2408	130	122	76	17
7543	74.7	34.40	2421	132	122	76	17
7544	46.5	34.40	2431	134	120	74	17
7545	35.5	33.80	2423	125	114	70	17
7546	33.8	40.06	3122	115	109	63	15
7547	51.6	38.60	2991	114	106	62	15
7548	66.3	37.84	2926	110	105	62	15
7549	66.3	31.70	2374	105	96	57	14
7550	61.8	28.94	2103	110	91	57	14
7551	60.5	23.64	1841	75	64	34	9
7552	11.2	23.70	1841	78	64	34	9
7553	75	23.64	1841	75	64	34	9
7554	48	17.85	1336	65	53	30	8
7555	57	18.74	1422	64	53	30	9
7556	70.5	17.57	1326	65	50	29	7
7557	84.6	16.29	1242	55	46	26	7
7558	73.5	16.37	1248	56	46	26	7
7559	85	16.57	1272	54	46	26	7
7560	58.6	16.52	1278	52	45	25	7
7561	60.4	16.25	1256	57	43	24	6
7562	64.8	16.04	1244	56	42	23	6
7563	70.8	15.79	1223	56	42	22	6
7564	84.1	17.16	1339	57	44	24	7
7565	106.4	16.47	1295	54	42	22	6
7566	72	15.97	1256	56	40	21	5
7567	63.2	16.15	1276	55	40	21	5
7568	67.7	14.74	1145	52	40	20	5
7569	57.1	16.74	1347	51	40	20	5
7570	66.7	16.72	1347	50	40	20	5
7571	88	16.75	1359	49	39	19	5
7572	57	17.34	1417	48	40	19	5
7573	64.2	17.01	1403	40	39	19	5
7574	79	17.66	1455	45	40	19	5
7575	65.7	17.85	1480	42	40	19	5
7576	78.3	17.91	1484	43	40	19	5
7577	69	17.67	1474	41	38	18	5
7578	54.9	17.50	1458	42	37	18	5
7579	41.2	16.47	1378	43	35	17	2
7580	45.9	16.11	1342	38	35	17	4
7581	45	16.02	1330	37	35	17	5
7582	51.9	16.01	1318	39	36	18	5

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7583	57.5	15.48	1256	40	37	19	5
7584	58.4	11.52	867	38	36	19	5
7585	89.4	17.84	1425	48	44	24	7
7586	75.1	21.33	1722	55	51	27	8
7587	75.6	22.37	1816	55	53	28	8
7588	81.8	21.09	1713	49	50	27	8
7589	55.6	21.24	1734	44	50	28	8
7590	57.5	28.74	2364	55	67	36	11
7591	61.6	12.51	1032	24	29	16	4
7592	70.4	17.01	1414	31	37	21	6
7593	60.2	21.19	1752	39	47	27	8
7594	74	18.95	1540	40	45	25	8
7595	93.9	18.22	1457	41	46	25	9
7596	78	16.88	1347	39	44	24	7
7597	97.5	15.69	1235	38	45	22	7
7598	93.7	14.54	1125	37	45	20	8
7599	90.5	13.16	1025	30	40	19	7
7600	64.6	29.63	2433	68	65	36	11
7601	45.9	33.44	2741	77	75	41	12
7602	62	38.96	3207	91	86	46	13
7603	106.9	43.85	3604	102	98	52	15
7604	89.2	45.42	3743	106	100	53	15
7605	76.4	45.24	3725	106	100	53	15
7606	82.1	45.16	3717	106	100	53	15
7607	83.9	43.72	3585	103	98	53	15
7608	67.9	43.91	3592	104	100	54	15
7609	76.3	43.52	3560	102	99	54	15
7610	50.7	43.57	3570	100	97	54	16
7611	97.1	43.55	3570	99	97	54	16
7612	110.9	43.98	3630	98	95	53	15
7613	80.4	47.18	3919	103	99	54	16
7614	86.6	49.87	4149	109	104	57	16
7615	111.5	52.23	4380	99	108	59	17
7616	60.1	46.14	3713	120	112	60	17
7617	55.6	42.85	3602	101	87	40	12
7618	63.7	31.80	2636	68	68	36	12
7619	69.4	29.60	2435	65	65	35	12
7620	83.3	24.61	1986	51	59	34	12
7621	52.5	22.38	1780	53	55	33	11
7622	45.5	22.57	1810	51	54	32	11
7623	93.7	23.00	1855	50	54	32	11
7624	62.1	26.04	2152	56	54	32	10
7625	69.3	30.18	2560	52	57	32	11
7626	85.2	33.57	2893	56	58	32	10
7627	3.3	27.87	2371	54	50	27	10
7628	11.8	25.04	2106	50	48	26	10
7629	9.7	21.60	1781	46	46	26	9
7630	13.3	20.27	1656	47	44	25	9
7631	17.7	23.28	1884	60	54	28	10
7632	36.3	20.10	1514	75	66	32	4
7633	34.5	29.67	2408	81	70	33	11
7634	23.2	26.94	2172	75	66	31	10
7635	14.4	18.03	1371	68	60	29	0
7636	16.2	29.75	2476	74	63	28	10
7637	11.5	28.91	2409	73	61	27	9
7638	32.2	28.76	2399	72	60	27	9
7639	17	30.80	2596	76	61	26	9
7640	30	30.99	2618	79	63	26	6
7641	23.6	30.76	2608	77	63	25	5

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7642	49	31.44	2678	75	60	24	8
7643	16.5	32.28	2764	77	61	23	7
7644	24.2	34.89	2999	81	64	24	8
7645	20.6	34.47	2958	82	63	24	8
7646	25.9	25.30	2139	64	51	20	6
7647	17.6	26.10	2238	66	49	17	5
7648	25.5	24.42	2041	68	53	19	6
7649	39.7	14.24	1079	63	49	18	0
7650	21.9	22.19	1831	63	52	19	6
7651	16.1	28.61	2420	80	60	19	5
7652	128.9	29.78	2525	83	62	19	5
7653	147.7	32.13	2734	89	65	19	6
7654	120.5	31.68	2691	89	66	19	5
7655	56.5	31.68	2691	89	66	19	5
7656	82.5	27.96	2355	80	60	19	5
7657	122.9	26.35	2215	73	56	19	6
7658	91.1	25.98	2185	71	55	19	6
7659	105	25.16	2134	66	51	18	5
7660	114.3	24.75	2114	62	48	17	5
7661	97	25.00	2139	62	48	17	5
7662	60.3	25.10	2152	62	47	17	5
7663	105.6	25.62	2201	62	48	17	5
7664	53.7	25.28	2184	57	47	16	5
7665	129	19.66	1652	55	45	16	1
7666	80.7	17.49	1427	60	46	16	0
7667	110.6	23.28	1982	61	45	16	5
7668	88.1	23.28	1982	61	45	16	5
7669	103.1	26.36	2287	61	46	16	5
7670	89.9	26.36	2287	61	46	16	5
7671	106.8	29.73	2596	67	50	17	5
7672	93.5	32.29	2817	72	54	19	6
7673	143.3	32.29	2817	72	54	19	6
7674	86.8	29.44	2574	65	49	17	5
7675	108.6	26.00	2284	57	42	14	4
7676	90.9	30.24	2668	65	47	15	5
7677	119.2	35.40	3133	76	54	17	5
7678	104.7	29.47	2610	63	45	14	4
7679	94.2	9.87	839	19	15	10	5
7680	104.6	17.73	1505	45	35	12	5
7681	95	18.81	1600	45	38	13	5
7682	103.1	18.81	1595	48	36	13	6
7683	88.2	18.96	1610	47	38	12	6
7684	108.6	17.99	1531	48	35	13	3
7685	78.3	18.08	1531	49	36	14	3
7686	95	30.30	2703	63	43	13	4
7687	81.9	30.95	2761	63	44	14	4
7688	85	30.33	2710	61	43	13	4
7689	81.9	30.84	2756	62	44	13	4
7690	92.5	20.24	1809	41	29	9	2
7691	102.1	19.13	1695	40	29	9	3
7692	101.8	18.93	1675	40	29	9	3
7693	94.4	19.48	1735	39	28	9	3
7694	84.3	19.48	1735	39	28	9	3
7695	84.8	20.79	1859	42	30	9	2
7696	123.5	26.24	2353	52	38	12	1
7697	82	26.24	2353	52	38	12	1
7698	74.6	27.03	2417	53	39	12	3
7699	73.4	27.52	2461	54	40	12	3
7700	74	22.30	1960	47	41	12	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7701	96.5	24.70	2203	46	41	13	0
7702	89.6	27.17	2447	47	41	12	1
7703	86.8	28.63	2588	47	41	12	2
7704	75.6	29.54	2669	49	43	12	2
7705	113.5	30.43	2752	52	43	12	2
7706	78.7	30.88	2789	57	44	12	1
7707	123	31.32	2826	63	44	12	0
7708	75	33.68	3058	58	47	12	1
7709	89.1	34.02	3087	59	48	12	1
7710	85.8	34.15	3086	60	49	13	2
7711	81	48.04	4196	121	86	22	4
7712	52.9	63.76	5484	184	125	31	5
7713	110	63.76	5484	184	125	31	5
7714	64.5	63.76	5484	184	125	31	5
7715	118	58.09	5033	162	108	27	4
7716	90.8	56.20	4882	154	102	26	4
7717	90.9	42.21	3684	110	74	20	3
7718	80	38.75	3409	98	64	17	2
7719	53.6	36.32	3228	78	58	16	2
7720	73.4	33.34	2994	63	51	14	1
7721	65.2	30.18	2711	56	46	13	1
7722	55.1	22.23	1895	61	47	15	1
7723	50.4	46.89	4047	110	87	29	9
7724	48.1	45.87	3932	107	89	31	10
7725	58.8	34.03	2961	77	61	20	5
7726	62.2	30.72	2687	69	53	17	4
7727	65	26.49	2347	59	44	13	0
7728	62.5	25.03	2229	55	40	11	0
7729	38.9	25.43	2277	54	38	11	0
7730	70.2	25.19	2256	54	37	11	0
7731	58.2	25.75	2310	55	37	11	0
7732	72.2	25.39	2283	54	36	10	0
7733	60.1	25.54	2293	54	36	10	1
7734	77.3	25.01	2254	53	35	9	0
7735	61.2	23.80	2145	50	33	9	0
7736	71.3	22.83	2059	48	32	8	0
7737	66.7	23.42	2090	54	36	9	0
7738	59.3	18.07	1553	55	36	9	0
7739	61.5	21.80	1931	54	35	9	0
7740	58.8	26.89	2428	57	37	9	0
7741	60.5	26.92	2431	57	37	9	0
7742	58.9	26.72	2411	57	37	9	0
7743	58.1	25.79	2325	55	36	9	0
7744	65.2	25.35	2286	54	35	9	0
7745	74.3	25.47	2296	55	35	9	0
7746	64	25.50	2299	55	35	9	0
7747	82.8	25.50	2304	54	34	9	0
7748	61.1	24.45	2207	52	34	8	0
7749	60.4	24.64	2220	53	34	9	0
7750	67.5	25.20	2271	54	35	9	0
7751	75.6	27.19	2444	58	38	10	1
7752	21.5	30.79	2774	66	43	11	0
7753	33.9	28.80	2581	62	42	11	1
7754	62.4	20.85	1831	48	38	11	0
7755	70.3	16.57	1416	48	35	10	0
7756	50.8	20.13	1767	49	36	10	0
7757	91.5	21.87	1931	48	37	11	1
7758	40	24.50	2190	47	39	11	1
7759	40	25.06	2241	48	40	11	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7760	25.7	25.92	2308	57	42	11	0
7761	47.2	25.90	2318	49	42	12	0
7762	57.9	29.55	2652	54	46	13	1
7763	41.7	31.35	2808	57	49	14	2
7764	48	32.53	2928	58	51	14	0
7765	27.5	31.84	2866	54	48	14	2
7766	32.6	28.14	2529	49	45	13	0
7767	40.8	24.33	2158	45	41	13	2
7768	102.3	20.60	1796	44	41	12	1
7769	58.7	11.53	898	45	39	12	0
7770	74.5	20.45	1760	52	43	13	0
7771	57.4	26.31	2339	49	46	14	0
7772	63.6	34.32	3034	78	56	16	2
7773	60.9	38.03	3393	77	61	17	1
7774	103.2	35.65	3205	64	56	16	0
7775	88.4	29.50	2658	51	46	13	0
7776	77.4	22.07	1996	38	33	9	0
7777	80.1	22.71	2063	38	32	9	0
7778	53	31.33	2847	52	43	12	1
7779	72.2	49.22	4462	82	70	19	2
7780	104.9	75.25	6716	144	120	34	5
7781	71.3	124.70	10836	298	236	70	10
7782	51.9	318.01	26765	884	735	227	31
7783	55.9	258.08	21826	707	580	177	24
7784	43.4	155.74	13395	406	316	91	11
7785	65.8	80.79	7000	205	156	44	5
7786	78.1	30.63	2650	76	59	16	4
7787	81.8	29.76	2606	70	50	15	4
7788	45.3	30.08	2605	75	59	14	4
7789	40.1	30.05	2605	73	58	15	4
7790	23.4	28.65	2534	64	47	13	2
7791	47.3	33.09	2723	111	84	23	4
7792	71.6	37.79	3239	105	79	22	1
7793	71.9	39.83	3455	102	77	22	1
7794	73.9	13.46	1188	29	22	6	2
7795	50.4	12.67	1100	30	23	7	2
7796	50.2	12.97	1125	31	24	7	2
7797	80.8	23.97	2131	51	38	10	2
7798	74.2	22.85	2031	49	37	10	1
7799	69.2	12.13	1075	27	20	6	0
7800	67.3	49.86	4407	110	84	23	3
7801	41.6	40.16	3444	103	90	24	0
7802	47.9	47.33	4138	114	85	23	4
7803	66.6	46.65	4130	96	80	22	3
7804	90.5	48.05	4233	112	80	22	4
7805	81.5	51.51	4546	119	85	23	4
7806	99.1	50.62	4380	134	98	25	4
7807	65	44.61	3738	143	106	26	3
7808	109.8	40.48	3480	116	84	21	0
7809	88	39.43	3394	110	80	21	1
7810	135.8	35.20	3054	86	66	19	4
7811	65.9	32.30	2795	78	61	19	4
7812	60.1	28.23	2425	69	56	18	4
7813	70.1	25.38	2164	63	52	18	4
7814	92.8	25.13	2141	62	52	18	4
7815	88.1	26.75	2294	65	53	18	4
7816	87	27.56	2370	66	54	18	4
7817	82.8	32.26	2762	81	66	21	4
7818	1.3	28.57	2437	72	60	19	4

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7819	12.1	17.65	1466	46	41	16	4
7820	9.2	16.53	1349	49	42	15	4
7821	18.7	18.55	1552	49	42	16	3
7822	33.5	18.58	1561	47	41	15	4
7823	14	21.96	1867	55	45	16	4
7824	23.3	22.99	1959	54	48	17	4
7825	10.9	19.91	1654	54	47	17	4
7826	13.8	17.61	1445	50	44	16	4
7827	17.6	18.84	1566	51	44	16	4
7828	20.5	17.28	1440	47	41	14	3
7829	16.8	17.34	1449	47	40	14	3
7830	9.8	18.55	1561	49	40	14	4
7831	11.8	15.70	1316	41	35	13	3
7832	14.3	17.77	1506	45	38	13	3
7833	13.1	19.51	1650	51	41	14	4
7834	16.5	22.27	1870	63	49	16	4
7835	6.5	22.89	1924	66	51	15	4
7836	95.2	22.44	1895	63	49	14	4
7837	101	22.37	1884	63	49	15	4
7838	87.7	22.01	1853	62	48	15	4
7839	143.5	21.66	1821	60	47	16	4
7840	85.8	22.01	1831	58	46	24	4
7841	128	22.68	1943	57	45	14	4
7842	93.6	22.87	1964	57	46	14	3
7843	91.1	23.70	2046	60	46	14	2
7844	82	24.08	2087	61	46	14	1
7845	121.1	26.06	2276	64	47	14	1
7846	77.8	31.46	2802	61	49	15	3
7847	88.2	38.65	3500	63	53	15	4
7848	89.5	38.05	3449	63	53	14	3
7849	67	36.82	3324	62	53	15	3
7850	114	36.49	3293	61	53	15	3
7851	67.5	25.60	2200	70	53	14	1
7852	100.8	26.75	2326	70	51	14	0
7853	71.6	30.18	2674	68	49	14	1
7854	94.5	31.55	2812	67	49	13	2
7855	72.1	31.77	2829	67	49	13	3
7856	93	32.25	2871	68	49	14	3
7857	76.7	32.48	2892	69	49	14	3
7858	88.7	32.51	2911	68	49	13	1
7859	85.7	32.64	2917	69	49	13	2
7860	126.8	32.87	2933	70	49	13	3
7861	87.5	33.01	2947	70	49	13	3
7862	86.8	33.40	2991	70	49	13	2
7863	141	33.64	3015	71	50	13	1
7864	95.8	33.99	3050	71	50	13	1
7865	102.8	34.51	3100	72	50	13	1
7866	104.6	35.22	3159	74	51	13	2
7867	97.2	35.43	3178	75	51	13	2
7868	88.3	35.69	3196	75	52	13	3
7869	85.9	35.73	3198	76	52	13	3
7870	78.9	36.26	3254	77	52	13	2
7871	75.9	38.30	3439	81	54	13	3
7872	104.2	39.71	3568	84	56	13	3
7873	76.8	39.15	3517	83	55	13	3
7874	60.3	30.38	2657	81	54	13	1
7875	79.7	29.15	2558	76	51	13	0
7876	59.3	31.38	2786	75	50	13	0
7877	65.6	37.60	3413	73	49	11	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7878	74.7	46.04	4242	78	51	12	1
7879	69.1	32.66	3004	55	37	9	1
7880	82.6	14.47	1317	25	18	4	2
7881	87.3	21.04	1914	39	26	6	2
7882	66.2	20.35	1850	38	25	6	2
7883	109.8	19.80	1800	37	24	6	2
7884	87.7	19.39	1758	36	25	6	2
7885	66.2	19.54	1785	35	23	5	2
7886	75.5	17.24	1556	36	22	5	2
7887	89.2	17.18	1494	40	34	8	2
7888	87.4	19.92	1726	47	39	10	3
7889	91	27.51	2483	48	41	11	1
7890	69.9	28.05	2535	49	41	11	1
7891	110.2	29.02	2622	53	42	10	2
7892	76.6	29.73	2675	61	43	11	1
7893	105.7	30.72	2758	64	44	11	2
7894	93.4	31.40	2816	66	45	11	3
7895	82.7	31.79	2850	69	46	11	3
7896	72.2	32.37	2907	67	47	11	3
7897	60.2	34.18	3080	65	50	11	3
7898	88.1	35.14	3155	74	51	12	2
7899	72.3	34.82	3148	63	50	11	3
7900	72.6	35.06	3167	64	51	12	3
7901	82.5	35.06	3167	64	51	12	3
7902	39.4	21.50	1875	50	38	11	3
7903	59.2	19.57	1696	46	36	11	3
7904	70.3	19.42	1680	46	36	11	3
7905	71.5	19.60	1695	47	37	11	3
7906	54.7	19.60	1695	47	37	11	3
7907	86.8	20.35	1770	47	37	11	3
7908	72.2	22.75	2012	50	37	11	2
7909	104	23.69	2108	51	38	11	1
7910	70.5	26.79	2399	54	39	11	2
7911	80.4	30.92	2788	60	41	11	3
7912	56.2	29.36	2642	59	40	10	3
7913	15.7	17.93	1579	38	30	9	2
7914	25	15.37	1342	33	27	9	2
7915	14.2	16.01	1391	37	29	9	3
7916	25	12.91	1087	37	29	9	2
7917	14	15.27	1306	41	33	10	0
7918	10	12.09	995	37	32	10	1
7919	12.9	18.02	1567	42	33	10	3
7920	14.5	15.55	1350	38	29	9	1
7921	28.6	16.25	1420	38	29	9	1
7922	25.1	17.54	1541	41	31	9	1
7923	8.2	17.72	1552	42	32	9	1
7924	12.8	17.96	1560	44	34	9	2
7925	14.6	17.51	1496	48	38	10	1
7926	22.7	12.18	980	44	35	10	1
7927	1.5	11.14	892	39	33	10	1
7928	9.9	16.36	1412	40	33	10	1
7929	15.8	19.27	1687	45	35	10	1
7930	30.7	13.70	1127	47	36	9	1
7931	58.1	8.69	760	21	17	4	0
7932	99.6	14.14	1233	35	26	7	1
7933	81.3	16.84	1470	42	31	8	1
7934	79.9	18.75	1644	45	33	8	2
7935	94	19.43	1703	46	34	9	2
7936	56.4	21.53	1909	49	35	9	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7937	95.7	23.59	2101	52	36	9	2
7938	54.2	26.37	2367	56	39	9	1
7939	98.1	27.36	2459	58	40	9	1
7940	66.9	24.16	2137	59	40	9	1
7941	41.7	21.05	1817	60	41	10	1
7942	92.1	21.16	1822	63	41	10	1
7943	100.3	23.39	2045	63	41	10	1
7944	104.7	27.77	2490	63	40	9	1
7945	71.6	27.82	2492	63	41	9	1
7946	102.4	27.92	2498	63	41	10	1
7947	80.1	28.05	2511	63	41	10	1
7948	53.1	28.50	2561	63	41	10	0
7949	116.1	29.94	2688	66	43	10	1
7950	181.2	30.80	2763	69	45	11	0
7951	70.4	30.86	2773	69	45	10	0
7952	101.7	31.30	2815	69	44	10	1
7953	54.8	31.57	2842	69	44	10	1
7954	61.2	32.21	2916	63	43	10	2
7955	44.4	31.22	2849	53	42	9	1
7956	46.6	30.74	2806	52	41	9	1
7957	44.2	30.35	2763	52	41	10	1
7958	78.3	29.88	2721	51	40	10	1
7959	61	29.92	2725	51	40	10	1
7960	52.7	30.25	2755	51	41	10	1
7961	78.2	30.75	2808	52	41	10	0
7962	106	14.06	1108	66	42	10	0
7963	122.6	14.06	1108	66	42	10	0
7964	67.4	24.07	2107	67	42	10	0
7965	82.2	31.78	2866	69	43	10	1
7966	82.6	28.40	2558	62	39	9	1
7967	48	22.93	2180	24	16	3	1
7968	173.9	22.89	2181	25	15	2	1
7969	112.5	22.00	2105	20	14	2	1
7970	191.6	26.26	2370	57	35	8	1
7971	96.7	30.46	2748	66	40	9	2
7972	60.1	31.56	2869	60	42	9	1
7973	66.7	26.04	2362	50	35	8	1
7974	73.7	18.70	1695	38	25	6	0
7975	64.5	22.33	2028	47	29	6	0
7976	102.7	28.36	2568	60	37	8	1
7977	51.3	32.14	2927	58	42	10	1
7978	61.3	32.28	2959	57	38	9	1
7979	79.9	25.02	2267	55	28	9	1
7980	206.1	34.98	3251	58	30	9	1
7981	83.6	38.14	3553	59	34	9	1
7982	64.9	42.54	3992	58	35	9	1
7983	122.5	45.65	4302	57	36	9	1
7984	68	32.16	2959	57	34	9	1
7985	79	24.97	2267	48	31	9	1
7986	83.6	35.62	3251	68	43	9	2
7987	104.6	38.77	3553	70	45	11	1
7988	27.4	43.25	3992	73	46	11	1
7989	124.4	46.49	4302	77	48	11	1
7990	74.9	49.01	4541	80	49	12	1
7991	66.8	49.48	4586	81	49	12	1
7992	99.8	31.95	2876	62	49	12	0
7993	50.1	31.95	2876	62	49	12	0
7994	33.7	37.93	3469	66	46	11	2
7995	27.6	34.59	3179	54	41	10	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7996	43.8	36.80	3408	51	41	10	1
7997	150.3	49.44	4603	68	51	12	1
7998	78.5	44.90	4178	62	46	11	2
7999	52.8	41.08	3815	57	44	10	2
8000	93.1	33.31	3084	48	37	9	1
8001	63.2	31.33	2900	46	36	8	0
8002	79.7	22.05	1994	38	32	8	1
8003	106.5	25.05	2297	37	31	8	1
8004	84.5	20.90	1899	36	27	7	1
8005	71.2	15.79	1409	34	24	7	1
8006	44.3	11.11	958	31	22	6	0
8007	44.3	13.95	1247	28	22	6	0
8008	7.3	16.13	1463	27	22	7	1
8009	30.7	17.04	1534	33	24	7	1
8010	4.4	19.24	1741	34	27	8	1
8011	3.7	19.00	1676	40	33	10	1
8012	18.3	19.57	1730	38	34	11	1
8013	15.2	24.21	2155	51	39	11	1
8014	4.2	23.54	2063	58	42	12	1
8015	9.5	22.04	1925	54	41	11	1
8016	11.7	22.30	1969	51	38	11	1
8017	24.5	21.83	1932	49	36	10	1
8018	14.9	24.26	2124	59	44	11	2
8019	12.3	24.74	2196	55	40	10	1
8020	34.7	25.93	2321	56	39	10	1
8021	18.7	28.32	2550	60	40	9	1
8022	80.9	27.70	2494	59	39	9	1
8023	41	25.23	2274	53	35	9	1
8024	42.7	25.05	2274	46	34	9	1
8025	60.1	25.88	2348	52	34	8	0
8026	72.4	27.68	2535	47	34	8	1
8027	75	27.62	2505	58	35	9	0
8028	60.2	24.03	2133	61	38	9	0
8029	70.8	33.26	3051	57	40	9	1
8030	85.6	38.35	3541	66	42	9	0
8031	43	39.77	3666	73	42	9	0
8032	39.8	39.41	3646	65	42	9	1
8033	54	38.38	3519	74	42	10	1
8034	61.8	37.52	3435	74	42	9	1
8035	46.3	38.02	3476	78	44	9	1
8036	54.5	39.39	3597	82	46	10	0
8037	67.6	40.51	3708	77	48	10	1
8038	59.4	41.84	3819	85	50	10	1
8039	49.2	41.94	3810	91	51	11	1
8040	66.8	39.04	3544	82	49	11	1
8041	27.3	36.92	3372	67	47	10	1
8042	35.7	33.99	3105	64	42	10	0
8043	37	21.87	1934	49	38	9	1
8044	55.2	24.66	2208	53	37	9	1
8045	45.4	25.37	2283	55	36	9	0
8046	58.5	24.91	2239	53	35	9	1
8047	57.8	25.20	2278	46	35	10	1
8048	64.2	27.03	2446	53	37	10	0
8049	88.5	28.05	2541	55	38	10	0
8050	73.2	29.58	2683	59	39	10	0
8051	69.1	30.96	2818	59	40	10	0
8052	84.7	31.59	2876	59	40	10	1
8053	66	32.76	3009	49	40	11	1
8054	65.3	33.63	3091	50	41	11	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8055	34	34.13	3146	49	40	11	1
8056	52.9	34.32	3181	46	38	10	1
8057	62	34.27	3176	46	38	10	1
8058	69.1	33.31	3079	46	37	11	1
8059	68.3	27.50	2500	46	38	11	0
8060	80.2	20.24	1776	45	38	11	0
8061	66	25.11	2276	41	36	10	1
8062	38.5	29.91	2745	43	37	11	1
8063	44	42.74	3903	72	54	15	1
8064	66.9	45.97	4152	93	62	17	1
8065	64	32.72	2952	66	45	12	1
8066	67.9	27.75	2611	34	24	6	0
8067	59.8	29.37	2775	35	21	6	1
8068	64.9	23.51	2185	34	23	6	1
8069	70.5	26.01	2447	31	21	6	1
8070	63.7	28.61	2711	32	19	6	1
8071	75.4	18.90	1737	27	22	7	1
8072	120.1	18.85	1737	27	22	7	0
8073	103.7	57.07	5253	87	66	18	2
8074	67.2	52.01	4728	93	70	18	1
8075	68.3	56.13	5121	97	73	19	1
8076	60	66.48	6107	108	80	20	1
8077	87.8	69.64	6409	110	83	21	1
8078	104.6	73.39	6753	116	87	22	1
8079	68	80.91	7442	127	96	24	3
8080	79.6	89.40	8228	139	106	26	3
8081	82.9	97.37	8955	151	117	29	3
8082	88.5	97.03	8914	152	118	30	2
8083	100.1	87.92	8049	142	112	29	2
8084	48.8	79.54	7203	157	106	27	3
8085	73.2	78.42	7119	142	107	27	2
8086	75.3	77.45	7006	151	108	27	1
8087	54.6	76.36	6897	153	107	27	1
8088	74.6	73.71	6679	132	104	26	2
8089	89.9	71.54	6463	142	100	25	1
8090	61.7	70.45	6356	147	98	25	1
8091	34.3	36.33	3077	119	80	19	0
8092	94.5	37.49	3215	112	77	19	0
8093	104.5	42.46	3696	113	79	20	1
8094	54.8	46.90	4153	110	78	19	1
8095	77.6	38.90	3461	88	63	16	1
8096	73.1	32.31	2853	76	56	14	0
8097	94.3	30.66	2701	73	54	14	0
8098	130.7	28.81	2523	71	53	14	0
8099	139.6	27.57	2404	69	52	14	1
8100	113.7	27.86	2425	71	53	14	1
8101	135	29.17	2543	73	55	14	1
8102	138.9	30.28	2648	76	56	14	1
8103	130.8	31.64	2779	78	56	14	1
8104	108.6	33.00	2910	80	57	14	1
8105	74.7	35.22	3120	83	58	15	1
8106	86.1	35.97	3190	84	58	15	1
8107	131.7	42.89	3816	96	68	18	1
8108	108.4	42.89	3816	96	68	18	1
8109	98.8	64.21	5663	148	110	30	2
8110	137.9	73.36	6457	171	127	35	3
8111	75.5	75.55	6658	175	130	36	3
8112	100.6	80.49	7097	183	138	39	4
8113	102.9	95.14	8367	214	167	49	5

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8114	113.2	95.14	8367	214	167	49	5
8115	10.0	43.6	3634	122	105	32	7
8116	27.6	5.7	473	13	10	6	4
8117	19.4	6.3	531	14	10	5	5
8118	21.8	6.8	586	14	11	6	3
8119	22.7	7.1	587	14	12	7	6
8120	26.4	6.9	560	13	12	7	8
8121	21.0	6.7	542	13	12	7	8
8122	14.8	6.5	525	13	11	7	7
8123	12.8	6.3	508	13	11	7	7
8124	9.8	6.0	490	13	10	7	6
8125	6.8	5.8	473	13	10	6	6
8126	3.8	5.6	456	12	10	6	6
8127	0.8	5.4	438	12	9	6	5
8128	4.9	4.6	400	10	7	2	3
8129	5.2	4.0	325	9	8	3	4
8130	6.6	5.3	436	11	9	5	5
8131	5.2	5.3	436	11	9	5	5
8132	4.7	4.9	392	11	9	5	6
8133	10.1	5.3	436	11	9	5	5
8134	21.3	5.3	436	11	9	5	5
8135	30.7	4.9	392	11	9	5	6
8136	34.4	3.4	289	6	5	3	3
8137	28.7	3.4	289	6	5	3	3
8138	30.9	3.4	289	6	5	3	3
8139	24.7	3.5	300	6	5	2	2
8140	27.6	4.7	399	7	7	4	3
8141	19.8	3.6	304	8	6	3	1
8142	20.7	3.8	331	7	7	3	0
8143	25.4	3.8	322	8	7	4	2
8144	15.0	3.7	315	9	6	3	2
8145	29.4	3.7	307	9	6	3	3
8146	21.9	3.4	293	8	6	3	1
8147	31.1	3.1	262	9	6	3	0
8148	23.5	2.8	237	8	6	2	0
8149	54.8	3.1	262	8	6	2	1
8150	48.4	4.0	337	10	7	3	3
8151	68.0	4.1	348	10	7	4	1
8152	53.4	4.2	366	10	7	3	1
8153	35.9	4.3	371	11	7	3	1
8154	32.2	4.1	364	10	7	2	0
8155	30.6	4.3	364	11	6	3	2
8156	39.4	4.0	356	10	6	1	0
8157	36.4	4.4	375	11	7	2	2
8158	37.8	4.4	377	11	7	3	2
8159	41.8	4.5	393	12	7	2	1
8160	35.6	4.6	393	11	7	3	2
8161	55.6	4.5	396	11	7	2	1
8162	34.8	4.5	389	11	7	2	2
8163	41.4	4.5	395	10	7	3	1
8164	43.4	4.5	396	10	6	3	0
8165	80.9	4.4	397	10	6	2	0
8166	73.2	5.2	453	11	7	3	3
8167	33.6	5.2	471	12	7	2	0
8168	34.9	5.0	432	11	7	3	2
8169	74.5	4.7	409	11	7	3	1
8170	44.2	4.4	376	10	7	3	3
8171	27.1	3.6	302	9	6	3	1
8172	46.3	4.2	362	9	7	3	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8173	40.1	3.9	340	10	6	2	0
8174	34.7	4.3	371	9	6	2	2
8175	54.6	4.6	395	9	7	2	4
8176	68.2	5.0	440	9	7	3	2
8177	57.5	5.2	459	9	7	3	2
8178	47.1	5.5	478	10	7	3	3
8179	56.0	5.7	496	10	8	3	3
8180	77.5	5.9	515	10	8	3	3
8181	64.9	6.1	534	10	8	3	3
8182	39.2	6.3	553	11	8	3	4
8183	38.1	5.9	519	11	8	3	3
8184	48.5	5.5	478	10	7	3	3
8185	39.3	5.7	496	10	8	3	3
8186	29.1	5.9	515	10	8	3	3
8187	72.8	6.1	534	10	8	3	3
8188	41.5	6.3	553	11	8	3	4
8189	26.2	5.9	519	11	8	3	3
8190	60.4	4.4	383	10	6	3	2
8191	72.3	4.8	417	12	7	3	1
8192	41.9	12.1	1080	29	17	5	0
8193	80.6	15.2	1358	34	20	6	2
8194	103.0	16.3	1461	35	20	6	4
8195	38.3	12.2	1091	27	16	5	1
8196	35.3	9.7	874	22	13	4	0
8197	50.7	8.6	777	19	11	2	1
8198	23.8	8.6	761	19	11	3	3
8199	48.2	8.3	738	18	11	3	1
8200	56.4	7.8	702	18	11	2	1
8201	51.6	7.7	694	17	10	2	1
8202	43.9	9.9	881	22	12	5	3
8203	1.1	6.5	579	13	9	3	1
8204	37.1	5.6	497	10	8	3	2
8205	47.5	5.9	528	10	9	3	0
8206	34.0	6.4	582	12	8	3	0
8207	52.8	6.7	610	13	8	4	0
8208	39.1	6.4	572	10	8	3	2
8209	38.5	5.6	491	12	10	4	0
8210	8.4	17.2	1451	57	33	10	4
8211	38.1	11.3	963	34	20	6	3
8212	29.6	9.0	782	26	16	5	0
8213	33.1	7.3	648	16	12	4	0
8214	35.5	7.0	620	16	11	3	1
8215	38.0	7.3	645	14	10	4	1
8216	25.4	7.0	619	15	10	3	2
8217	51.4	6.2	544	17	10	4	0
8218	25.2	6.5	579	15	10	4	0
8219	22.0	6.7	585	16	10	4	2
8220	24.1	7.0	612	16	10	3	2
8221	30.0	7.0	621	16	10	4	1
8222	28.1	6.6	586	15	9	3	1
8223	53.7	6.3	552	14	9	3	3
8224	27.1	6.2	545	14	9	3	1
8225	42.8	5.6	493	14	9	3	1
8226	27.5	4.6	390	15	9	3	0
8227	25.0	6.1	535	15	10	3	0
8228	27.3	5.9	529	14	9	2	1
SAN CRISTOBAL Fm.							
8229	35.1	5.8	507	15	9	3	2
8230	18.6	5.6	491	14	8	3	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8231	21.3	5.7	497	14	9	2	3
8232	38.0	5.9	517	15	9	3	1
8233	29.0	6.0	531	16	9	3	0
8234	18.6	4.8	414	15	9	3	0
8235	27.6	5.9	522	16	9	3	0
8236	21.9	5.7	505	16	8	3	0
8237	15.3	5.7	499	16	9	3	0
8238	11.2	6.0	520	16	9	4	1
8239	32.8	5.9	520	15	9	3	0
8240	28.9	5.5	489	13	9	3	0
8241	39.7	5.0	424	17	10	3	0
8242	32.4	6.2	537	17	10	3	1
8243	32.8	6.2	536	17	10	3	2
8244	32.9	5.4	468	15	9	3	1
8245	34.6	6.5	557	18	10	3	3
8246	28.4	6.5	563	18	10	3	2
8247	31.3	6.4	561	18	10	3	0
8248	36.4	6.4	565	18	10	3	0
8249	32.9	5.8	499	17	10	3	0
8250	48.0	5.3	457	16	10	3	0
8251	29.6	6.4	551	17	11	4	1
8252	46.6	6.4	557	18	11	4	0
8253	41.4	6.3	556	17	11	3	1
8254	52.3	6.4	545	17	10	3	2
8255	41.7	6.4	554	17	10	3	2
8256	40.6	6.3	557	17	10	3	1
8257	41.7	6.3	558	17	10	2	1
8258	39.4	6.4	560	17	10	3	1
8259	33.3	5.3	448	18	10	3	1
8260	30.1	5.7	487	18	10	3	2
8261	39.2	6.2	546	17	10	3	1
8262	37.9	6.2	540	17	10	3	1
8263	31.4	5.9	512	16	9	3	3
8264	35.3	5.4	479	15	9	2	0
8265	15.8	5.3	472	15	8	2	0
8266	14.0	5.9	512	16	9	2	3
8267	13.7	4.3	366	17	9	2	0
8268	33.2	5.2	444	16	9	3	1
8269	43.7	5.7	488	17	9	3	2
8270	32.2	5.6	483	17	9	2	1
8271	27.3	5.4	467	17	9	2	2
8272	38.3	5.3	457	16	8	2	2
8273	33.0	5.3	453	15	9	4	2
8274	29.6	5.1	446	16	9	2	0
8275	25.2	5.2	439	15	9	2	2
8276	54.8	4.1	346	15	8	2	0
8277	22.9	5.1	445	16	9	2	1
8278	17.0	5.5	477	17	9	2	0
8279	29.2	5.6	494	17	9	2	0
8280	23.4	5.8	509	17	9	2	0
8281	24.0	5.3	460	16	9	2	0
8282	33.3	4.9	430	15	8	1	0
8283	27.1	5.1	453	16	8	1	1
8284	33.8	5.8	512	17	9	1	1
8285	36.2	3.8	346	9	6	0	0
8286	32.0	16.9	1520	44	21	5	0
8287	30.4	9.1	812	23	13	3	0
8288	29.7	7.1	621	23	13	2	0
8289	20.0	5.7	494	18	10	2	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8290	25.0	5.4	470	17	9	3	0
8291	21.4	5.2	440	16	9	3	2
8292	26.0	5.5	474	17	9	3	1
8293	85.3	5.6	489	17	9	3	0
8294	79.2	5.3	462	16	9	3	0
8295	38.4	5.1	447	16	9	3	0
8296	62.2	5.0	432	16	8	2	0
8297	60.5	4.8	416	15	8	2	0
8298	41.7	4.6	401	15	8	2	0
8299	41.7	4.4	386	14	8	2	0
8300	41.7	4.3	370	14	8	2	0
8301	41.7	4.1	355	13	7	1	0
8302	41.7	3.9	340	13	7	1	0
8303	10.2	3.7	324	12	7	1	0
8304	58.3	3.6	309	12	7	1	0
8305	68.2	3.4	293	11	6	1	0
8306	46.7	3.2	278	11	6	1	0
8307	46.7	3.0	263	10	6	0	0
8308	46.7	2.8	247	10	6	0	0
8309	37.9	2.9	249	10	6	1	0
8310	41.5	3.0	249	10	6	2	1
8311	43.3	2.8	231	10	5	2	0
8312	43.3	2.6	214	10	5	2	0
8313	43.3	2.4	196	10	5	1	0
8314	43.3	2.8	243	10	5	1	1
8315	43.3	3.3	289	11	5	1	1
8316	43.3	3.4	296	11	6	1	1
8317	37.0	3.4	301	11	6	1	0
8318	11.9	3.4	301	11	6	1	0
8319	61.1	3.6	315	11	6	2	0
8320	31.2	3.9	342	12	7	1	0
8321	31.2	3.9	342	12	7	1	0
8322	54.0	3.8	329	12	6	1	0
8323	52.4	3.6	318	11	6	1	0
8324	67.8	3.6	316	11	6	1	0
8325	71.1	3.8	335	12	6	1	0
8326	71.1	4.0	348	13	6	1	0
8327	53.7	4.1	357	13	6	2	1
8328	73.5	4.1	362	13	6	1	0
8329	48.1	4.1	364	13	6	1	0
8330	71.4	4.1	360	13	7	2	0
8331	44.0	3.8	331	12	6	2	0
8332	19.4	3.6	317	11	6	1	0
8333	37.2	3.6	313	11	6	2	0
8334	56.1	3.3	288	11	6	2	0
8335	70.4	3.7	321	11	6	2	0
8336	34.6	3.9	344	11	6	1	0
8337	86.3	4.0	350	11	6	1	1
8338	49.1	4.0	348	12	6	1	0
8339	38.3	3.8	336	11	5	1	0
8340	34.9	3.8	341	11	6	1	0
8341	51.5	4.0	353	11	6	1	0
8342	50.5	4.0	360	11	6	1	0
8343	54.3	4.2	366	12	6	2	1
8344	35.6	4.1	362	12	6	1	0
8345	50.3	4.1	363	12	6	1	1
8346	71.4	3.3	280	12	6	1	0
8347	33.4	4.8	423	13	7	2	0
8348	78.7	4.8	421	13	7	2	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8349	77.0	4.8	420	13	7	2	1
8350	34.4	4.5	399	13	6	1	0
8351	76.9	4.6	413	13	7	1	0
8352	85.2	4.8	423	13	7	2	0
8353	51.3	4.6	414	13	6	2	0
8354	17.5	4.7	418	13	6	1	0
8355	62.2	4.7	422	13	6	1	0
8356	58.8	4.7	422	13	6	1	0
8357	52.1	4.6	417	13	6	1	1
8358	20.1	4.4	393	12	6	1	0
8359	15.8	4.2	370	12	6	1	0
8360	26.5	3.9	349	12	6	1	0
8361	23.4	3.8	340	11	5	1	0
8362	18.0	3.8	339	11	5	0	0
8363	20.2	3.9	353	12	5	0	0
8364	40.2	3.8	344	11	5	1	0
8365	58.4	3.1	273	13	5	0	0
8366	52.4	3.5	309	12	5	1	0
8367	25.2	4.3	381	12	6	1	0
8368	32.9	4.4	393	13	5	1	0
8369	46.4	4.4	395	13	6	1	0
8370	45.3	4.2	384	12	5	0	0
8371	27.6	4.3	386	12	6	1	0
8372	48.5	4.4	394	13	5	0	0
8373	65.0	4.2	380	12	5	0	0
8374	18.0	3.9	353	12	5	0	0
8375	19.9	3.5	307	11	5	1	0
8376	94.1	3.4	300	11	5	1	0
8377	40.9	4.9	441	14	6	1	0
8378	19.7	4.5	401	13	6	1	0
8379	42.4	4.9	443	14	6	0	0
8380	48.2	2.2	199	7	3	0	0
8381	21.6	0.6	52	2	1	0	0
8382	21.6	0.0	0	0	0	0	0
8383	49.4	0.7	67	2	1	0	0
8384	45.0	2.6	234	8	3	0	0
8385	16.1	4.3	388	12	5	0	0
8386	13.3	4.0	366	12	5	0	0
8387	31.5	3.7	324	12	5	1	0
8388	33.7	3.4	301	12	5	1	0
8389	79.3	4.6	398	14	7	2	1
8390	78.9	4.3	373	14	7	1	0
8391	91.7	3.5	309	12	6	1	0
8392	91.7	3.4	294	11	6	1	0
8393	24.2	3.8	334	12	7	1	0
8394	51.2	3.8	331	12	6	0	0
8395	24.8	3.6	323	11	6	0	0
8396	24.0	3.6	323	11	6	0	0
8397	44.6	4.9	437	13	7	2	0
8398	56.8	5.0	446	13	7	1	1
8399	61.9	4.6	417	12	6	1	0
8400	1.6	2.0	180	6	3	0	0
8401	33.9	2.0	176	6	3	0	0
8402	14.7	2.1	190	6	3	0	0
8403	11.1	2.4	212	7	3	1	0
8404	7.5	2.4	220	7	3	0	0
8405	3.4	2.2	193	8	4	0	0
8406	1.8	1.6	134	6	3	0	0
8407	13.7	2.0	172	6	3	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8408	12.7	2.0	179	6	3	1	0
8409	22.8	2.0	177	6	3	1	0
8410	10.7	2.0	179	6	2	0	0
8411	8.4	2.0	184	6	2	0	0
8412	12.7	1.9	170	6	3	0	0
8413	8.0	2.0	178	6	3	1	0
8414	14.2	2.1	186	6	3	0	0
8415	13.8	2.1	191	6	3	1	0
8416	12.3	1.5	124	6	3	0	0
8417	10.0	2.0	177	6	3	1	0
8418	1.5	0.9	80	3	1	0	0
8419	42.8	1.0	87	3	1	0	0
8420	80.4	1.2	111	4	0	0	0
8421	46.8	1.8	161	6	2	0	0
8422	33.3	2.3	210	7	3	0	0
8423	35.1	2.9	261	8	4	0	1
8424	39.6	2.8	254	8	4	0	0
8425	33.8	2.2	195	8	3	0	0
8426	40.5	3.1	281	8	4	0	1
8427	50.4	3.1	284	8	4	0	0
8428	48.0	3.1	280	8	4	0	0
8429	42.6	3.2	279	8	4	1	1
8430	30.4	3.2	296	7	4	0	0
8431	47.4	3.4	309	9	4	0	0
8432	54.8	3.4	315	9	4	0	0
8433	30.4	3.4	311	9	4	1	0
8434	58.1	3.4	311	8	4	1	0
8435	39.3	3.5	316	9	4	1	1
8436	37.4	3.6	330	8	4	0	0
8437	64.4	3.7	333	10	4	1	0
8438	45.8	3.7	342	9	4	0	0
8439	50.3	3.9	357	9	4	1	0
8440	35.1	4.1	373	10	4	1	0
8441	41.8	4.1	377	10	4	0	0
8442	40.6	4.1	375	10	4	0	0
8443	49.7	4.2	384	10	5	0	1
8444	40.6	4.2	387	11	4	0	0
8445	36.6	4.2	385	10	5	0	0
8446	76.1	4.2	385	11	4	0	0
8447	41.4	4.2	386	11	4	1	0
8448	34.9	4.2	379	11	4	1	1
8449	53.2	4.2	380	11	4	0	0
8450	39.9	4.3	394	11	4	1	0
8451	106.0	4.6	419	11	5	1	0
8452	49.4	4.7	430	12	5	1	1
8453	38.7	4.7	432	12	5	0	1
8454	37.4	4.7	437	10	5	0	0
8455	36.2	4.0	369	10	4	0	0
8456	37.0	3.7	340	9	4	0	0
8457	38.4	3.6	328	10	4	0	1
8458	29.3	3.5	320	9	4	0	0
8459	30.2	3.4	315	9	3	0	0
8460	28.9	3.4	310	9	4	1	0
8461	31.0	2.5	222	10	3	0	0
8462	23.7	3.0	266	10	4	0	0
8463	34.4	3.4	305	10	4	0	0
8464	37.7	3.2	297	8	3	0	0
8465	36.2	3.2	294	9	3	1	0
8466	28.0	3.8	346	10	4	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8467	47.1	3.7	336	10	4	1	0
8468	39.9	3.4	304	9	4	1	0
8469	48.5	3.4	314	9	4	0	0
8470	33.1	3.8	345	11	4	0	0
8471	43.0	3.2	297	8	3	0	0
8472	30.2	3.3	294	9	3	1	0
8473	27.7	3.8	346	10	4	0	0
8474	35.1	3.7	336	10	4	0	0
8475	38.4	2.1	191	6	2	0	0
8476	30.1	2.8	257	9	3	0	0
8477	62.9	3.4	299	10	4	0	1
8478	34.6	3.4	302	10	4	1	1
8479	31.4	3.4	306	9	4	0	0
8480	28.4	3.5	306	9	4	1	1
8481	31.8	3.3	301	9	4	0	0
8482	28.4	3.4	304	9	4	1	0
8483	36.3	3.4	309	9	4	1	0
8484	98.1	2.8	241	8	4	1	1
8485	31.6	2.4	212	8	4	1	0
8486	22.6	2.4	211	8	4	0	0
8487	60.6	2.6	224	8	4	0	1
8488	30.1	2.7	238	8	4	0	0
8489	58.5	3.0	270	9	5	0	0
8490	9.4	3.1	279	8	3	1	1
8491	76.2	3.1	283	9	4	0	0
8492	88.3	3.0	277	9	3	0	0
8493	55.6	2.8	248	7	4	1	1
8494	27.9	2.8	263	6	3	0	0
8495	20.3	3.2	290	8	3	0	1
8496	21.5	3.0	277	8	3	0	0
8497	27.1	2.9	266	8	3	0	0
8498	27.5	3.0	263	8	3	1	1
8499	1.4	3.0	263	8	3	1	1
8500	14.7	2.7	250	7	2	1	0
8501	9.7	2.6	240	7	2	1	0
8502	23.1	2.0	180	6	2	0	0
8503	2.4	1.3	113	4	2	0	0
8504	11.9	1.3	111	4	2	0	0
8505	3.2	1.2	101	4	2	0	0
8506	8.8	1.2	104	4	1	0	0
8507	4.4	1.2	104	4	1	0	0
8508	2.7	1.0	90	4	1	0	0
8509	3.3	0.9	85	3	0	0	0
8510	19.8	1.1	103	3	0	0	0
8511	8.7	1.0	96	3	0	0	0
8512	7.0	0.8	74	3	1	0	0
8513	3.1	0.8	71	4	0	0	0
8514	21.5	0.8	69	4	0	0	0
8515	21.9	1.3	114	4	1	0	0
8516	22.2	1.4	127	4	1	0	0
8517	19.6	1.3	123	4	1	0	0
8518	14.6	1.2	111	4	1	0	0
8519	23.5	1.0	92	3	1	0	0
8520	42.1	1.2	113	3	1	0	0
8521	43.4	1.4	128	3	1	0	0
8522	36.5	1.2	110	3	1	0	0
8523	28.1	1.5	143	3	1	0	0
8524	66.5	1.6	146	3	1	0	0
8525	20.4	1.6	149	4	1	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8526	15.7	1.6	149	4	2	0	0
8527	18.1	1.6	147	5	1	0	0
8528	36.3	1.7	159	4	2	0	0
8529	36.3	1.7	159	4	2	0	0
8530	36.3	1.7	159	4	2	0	0
8531	85.1	1.8	163	4	2	0	0
8532	45.9	1.9	174	6	2	0	0
8533	51.2	2.0	177	6	2	0	0
8534	32.9	2.1	188	5	2	1	1
8535	24.3	1.8	168	4	2	0	0
8536	12.1	1.9	178	5	2	0	0
8537	90.6	1.8	170	4	2	0	0
8538	10.1	1.7	154	5	2	0	0
8539	81.9	1.0	90	3	0	0	0
8540	38.1	0.9	84	3	1	0	0
8541	65.5	0.9	80	3	1	0	0
8542	68.8	0.9	78	3	1	0	0
8543	87.5	0.8	65	3	2	0	0
8544	54.8	1.5	138	5	2	0	0
8545	63.2	2.4	226	6	2	0	0
8546	74.4	3.1	286	7	3	0	0
8547	68.9	3.7	349	8	3	0	0
8548	57.3	3.4	315	8	3	0	0
8549	56.5	3.8	356	9	3	0	0
8550	21.9	6.3	570	15	5	2	1
8551	53.3	5.8	535	13	5	0	0
8552	44.8	6.1	558	14	5	1	0
8553	69.9	6.3	583	16	6	0	0
8554	28.6	5.9	542	14	6	0	0
8555	17.0	5.2	479	13	5	0	0
8556	28.3	4.6	426	10	5	0	0
8557	24.1	4.6	420	10	5	0	0
8558	37.6	4.4	406	10	5	0	0
8559	19.0	4.4	409	9	5	0	0
8560	50.4	4.5	416	9	5	0	0
8561	43.3	4.4	411	9	5	0	0
8562	42.3	4.5	411	9	4	1	0
8563	22.9	4.8	441	10	5	0	0
8564	34.1	4.4	403	9	5	0	0
8565	39.3	4.1	377	9	4	0	1
8566	58.6	4.4	406	10	5	0	0
8567	20.5	4.4	409	9	5	0	0
8568	31.0	4.5	416	9	5	0	0
8569	47.7	4.4	411	9	5	0	0
8570	81.2	4.5	411	9	4	1	0
8571	34.4	4.8	441	10	5	0	0
8572	32.1	4.8	447	11	5	0	0
8573	28.0	4.5	414	11	5	0	0
8574	36.5	4.4	400	11	4	0	0
8575	27.4	3.2	292	9	4	0	0
8576	26.3	3.6	320	9	4	1	1
8577	51.1	3.5	318	8	4	0	0
8578	60.1	3.7	338	9	4	0	0
8579	34.8	3.9	354	9	4	1	0
8580	5.0	3.3	302	8	4	1	0
8581	45.8	3.6	325	8	4	1	0
8582	44.4	4.7	425	10	6	1	0
8583	86.7	5.4	489	12	7	1	0
8584	42.1	4.7	429	10	6	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8585	50.8	4.2	393	8	4	0	1
8586	61.2	4.2	390	8	4	0	0
8587	47.0	4.1	377	8	4	0	0
8588	50.2	4.0	373	8	4	1	0
8589	58.5	3.8	353	7	4	1	0
8590	1.8	2.5	227	6	2	1	0
8591	14.1	2.6	240	6	3	0	0
8592	5.2	2.7	248	6	2	0	0
8593	2.3	2.4	218	5	3	1	1
8594	3.7	2.2	204	5	3	0	0
8595	4.8	2.0	180	6	3	0	0
8596	5.7	1.6	139	4	2	1	0
8597	15.7	1.6	148	4	2	0	0
8598	4.7	1.7	158	5	2	0	0
8599	3.0	1.9	170	5	3	1	1
8600	8.5	1.6	146	4	2	1	0
8601	7.1	1.8	163	5	2	1	0
8602	5.7	1.7	152	4	2	0	0
8603	3.6	1.4	131	3	2	0	0
8604	6.1	1.2	113	3	1	0	1
8605	3.7	1.2	107	3	2	0	0
8606	11.7	1.4	136	4	0	0	0
8607	7.3	1.2	107	3	1	1	1
8608	7.1	1.1	104	3	1	0	0
8609	1.4	1.5	136	4	1	0	0
8610	4.9	1.9	173	5	2	0	0
8611	2.6	2.3	205	6	3	0	1
8612	27.0	2.2	197	6	3	1	0
8613	3.7	2.2	197	6	3	1	0
8614	49.7	2.5	218	6	3	1	1
8615	36.0	2.5	225	5	3	1	1
8616	52.2	2.7	246	5	3	1	0
8617	98.9	3.0	277	6	3	1	0
8618	64.0	3.4	314	6	3	0	0
8619	94.2	3.6	335	6	4	0	0
8620	86.6	3.8	351	7	3	0	1
8621	75.3	2.9	262	7	4	0	0
8622	87.5	3.5	321	7	3	0	1
8623	52.7	3.7	342	6	4	1	1
8624	52.7	3.7	342	6	4	1	1
8625	52.7	3.7	342	6	4	1	1
8626	41.7	3.7	345	6	4	0	0
8627	64.6	3.7	342	6	3	0	1
8628	47.1	3.6	339	6	3	0	0
8629	36.4	3.8	358	7	4	1	0
8630	58.0	4.0	370	7	4	1	0
8631	62.2	4.1	384	7	4	1	1
8632	68.3	4.3	393	7	4	1	1
8633	67.6	4.3	398	7	4	0	1
8634	53.8	4.3	401	8	4	0	0
8635	77.8	4.3	401	8	4	0	0
8636	41.6	4.1	387	7	3	1	0
8637	39.4	4.0	366	8	4	1	1
8638	23.4	3.5	318	8	3	0	0
8639	18.9	3.5	318	8	3	1	1
8640	20.4	3.2	289	7	3	0	0
8641	8.8	2.9	268	7	3	0	0
8642	35.4	3.1	287	7	3	0	0
8643	58.5	3.0	274	8	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8644	48.6	2.7	245	8	3	0	0
8645	51.2	3.7	341	8	3	0	1
8646	42.0	3.5	330	7	3	0	0
8647	24.3	3.2	295	7	3	0	0
8648	16.3	3.3	303	7	3	0	0
8649	33.8	2.9	272	7	3	0	0
8650	37.7	1.4	134	4	1	0	0
8651	41.5	2.1	192	6	3	0	0
8652	19.9	3.0	283	6	3	0	0
8653	42.2	3.4	313	7	3	0	0
8654	25.1	3.3	310	7	3	0	0
8655	25.3	0.9	88	3	0	0	0
8656	51.5	2.5	232	5	2	0	0
8657	26.9	3.7	346	7	3	0	0
8658	62.4	4.0	364	8	4	0	1
8659	52.8	3.9	362	7	4	1	1
8660	68.5	4.0	370	7	4	0	0
8661	42.1	4.2	394	8	4	0	0
8662	85.9	4.2	389	9	4	0	0
8663	58.2	3.8	348	10	4	0	0
8664	60.4	4.1	372	10	4	0	0
8665	8.7	4.4	404	10	4	0	1
8666	66.5	4.7	434	11	5	1	0
8667	80.4	4.8	443	11	5	1	0
8668	61.8	5.1	461	13	5	0	1
8669	73.9	6.2	565	15	7	0	1
8670	26.6	10.2	931	26	12	1	0
8671	65.5	8.0	724	22	10	0	1
8672	57.6	7.4	663	21	9	2	1
8673	5.0	4.6	414	13	6	1	0
8674	3.9	3.0	271	8	3	0	0
8675	20.4	3.4	309	7	4	0	1
8676	38.1	3.7	345	7	4	1	0
8677	51.8	4.0	368	7	4	0	0
8678	63.7	4.2	389	7	4	0	0
8679	43.4	4.3	399	8	4	0	0
8680	32.0	4.3	403	8	4	0	0
8681	33.1	2.2	206	5	1	0	0
8682	26.1	1.0	92	3	1	1	0
8683	46.7	0.9	77	2	1	0	0
8684	2.3	0.8	69	2	1	0	0
8685	2.6	0.9	78	2	1	0	0
8686	5.6	0.9	82	2	1	0	0
8687	2.8	0.7	68	2	0	0	0
8688	5.9	0.7	66	2	0	0	0
8689	7.5	0.7	61	2	0	0	0
8690	4.5	0.5	50	2	0	0	0
8691	3.5	0.6	56	2	1	0	0
8692	26.3	0.6	61	2	0	0	0
8693	2.0	0.7	61	2	1	0	0
8694	10.1	0.7	60	2	1	0	0
8695	16.2	0.8	73	2	1	0	0
8696	67.0	0.8	74	3	1	0	0
8697	4.1	0.9	83	3	1	0	0
8698	7.3	1.0	84	2	1	1	1
8699	8.9	1.2	108	3	1	1	0
8700	3.0	1.1	103	3	1	0	0
8701	33.9	1.2	105	3	1	0	1
8702	40.9	1.2	108	3	1	0	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8703	77.5	1.2	115	3	0	0	0
8704	79.0	1.3	121	3	1	0	0
8705	90.1	1.4	123	3	2	0	1
8706	38.9	1.5	135	4	2	0	0
8707	76.2	1.7	157	4	1	0	0
8708	33.3	1.4	120	4	2	0	0
8709	41.3	1.5	138	4	2	0	0
8710	31.9	1.8	161	4	2	0	0
8711	41.1	1.8	169	5	2	0	0
8712	33.9	2.2	199	5	2	0	0
8713	32.5	2.3	212	5	2	0	1
8714	80.7	2.3	209	6	2	0	1
8715	29.8	2.1	196	5	2	0	0
8716	33.2	2.0	177	4	2	1	1
8717	34.2	2.1	190	5	2	1	1
8718	31.5	2.1	190	5	2	1	0
8719	39.8	1.9	175	5	2	0	0
8720	35.1	1.7	157	4	2	0	0
8721	37.1	1.9	172	4	2	0	0
8722	28.7	1.8	161	4	2	0	1
8723	15.3	2.0	184	4	2	0	0
8724	33.5	2.2	201	5	2	0	0
8725	21.0	2.2	199	5	2	0	1
8726	37.9	2.1	192	4	2	0	0
8727	22.4	1.9	173	4	2	0	0
8728	34.9	1.6	145	4	3	0	1
8729	33.1	1.9	173	5	2	0	0
8730	51.6	2.1	192	6	2	0	0
8731	36.0	2.1	189	5	2	0	0
8732	36.0	2.1	189	5	2	1	0
8733	36.5	2.0	183	5	2	1	0
8734	6.9	2.0	178	4	2	0	1
8735	18.2	1.9	176	4	2	0	0
8736	30.0	1.9	175	4	2	0	0
8737	47.7	1.9	174	4	2	1	0
8738	26.0	2.6	235	5	3	1	0
8739	27.9	3.5	319	6	4	1	0
8740	11.3	3.0	271	6	3	1	0
8741	25.8	2.1	180	5	3	1	1
8742	21.1	1.3	115	3	1	1	1
8743	33.0	0.3	28	1	0	0	0
8744	27.3	0.1	7	0	0	0	0
8745	26.2	0.7	61	2	0	0	0
8746	35.5	0.3	28	1	0	0	0
8747	50.4	1.9	169	5	2	0	0
8748	41.1	1.9	169	5	2	0	0
8749	101.3	1.6	135	5	2	1	0
8750	86.5	2.0	183	6	2	1	0
8751	80.7	2.5	226	6	2	0	0
8752	64.6	2.5	229	6	3	0	1
8753	48.1	2.4	222	6	2	0	0
8754	36.7	2.4	220	6	2	1	0
8755	91.0	2.5	230	6	2	1	1
8756	81.2	2.5	226	6	2	0	0
8757	34.8	2.3	215	5	2	0	0
8758	36.6	2.2	199	5	2	0	0
8759	25.0	2.2	196	6	2	1	0
8760	50.0	2.5	220	6	3	1	1
8761	28.1	2.5	232	6	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8762	88.0	2.5	230	6	3	0	0
8763	46.4	2.5	232	6	2	0	0
8764	65.0	1.8	161	5	3	1	0
8765	22.3	2.1	190	5	3	0	0
8766	54.7	2.3	213	5	3	0	0
8767	63.6	2.6	235	6	3	0	1
8768	39.6	1.9	168	4	2	0	1
8769	61.3	2.0	178	5	2	0	1
8770	39.8	2.3	207	6	3	1	0
8771	43.0	2.2	200	6	3	0	0
8772	55.6	2.3	203	6	3	0	1
8773	47.0	2.6	232	6	3	1	1
8774	54.8	2.6	235	6	3	0	1
8775	60.8	2.4	223	6	2	1	0
8776	7.9	2.3	216	5	2	0	0
8777	59.6	2.5	232	6	3	0	0
8778	3.2	2.1	190	5	2	1	0
8779	2.9	1.4	127	4	1	0	0
8780	63.3	1.2	111	3	1	0	0
8781	9.5	1.3	116	3	1	0	0
8782	16.2	1.3	117	4	1	0	0
8783	9.5	1.4	125	4	2	0	1
8784	5.0	1.5	138	5	2	0	0
8785	6.6	1.1	93	3	2	0	0
8786	5.0	1.5	128	4	2	0	0
8787	49.5	1.7	155	5	2	0	0
8788	29.6	1.8	164	5	2	0	0
8789	40.5	1.9	171	4	2	0	0
8790	42.3	2.0	178	5	2	0	0
8791	56.6	2.3	208	5	2	1	1
8792	37.1	3.0	275	5	3	0	1
8793	48.4	3.2	292	5	3	0	1
8794	49.4	2.7	251	5	3	1	0
8795	35.7	1.9	176	5	2	0	0
8796	20.8	1.8	164	5	2	0	1
8797	16.5	1.8	166	3	2	0	0
8798	16.5	1.8	163	3	2	0	1
8799	4.7	1.8	165	3	2	0	0
8800	6.3	1.8	167	4	2	0	0
8801	1.3	1.2	103	3	2	0	0
8802	65.0	1.0	89	3	1	0	0
8803	14.3	1.1	91	3	1	1	1
8804	2.5	1.5	128	4	2	1	0
8805	4.2	1.4	129	4	2	0	0
8806	14.2	2.0	178	4	2	0	1
8807	2.8	1.3	112	3	2	1	0
8808	4.9	2.0	176	3	2	1	1
8809	39.8	1.9	176	4	2	1	0
8810	57.1	2.0	174	3	2	1	1
8811	58.5	2.4	216	5	2	1	1
8812	50.2	2.4	221	5	2	1	0
8813	36.3	1.7	147	6	3	1	0
8814	41.1	2.1	197	4	2	0	0
8815	25.3	2.3	204	5	2	0	1
8816	27.8	2.2	206	4	2	0	0
8817	35.7	2.2	208	5	2	0	0
8818	55.9	2.9	266	5	3	0	0
8819	39.2	2.9	266	7	3	1	0
8820	38.2	2.9	266	7	3	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8821	64.6	3.0	275	5	3	1	1
8822	39.6	2.7	253	5	3	0	0
8823	25.8	2.7	246	5	3	0	0
8824	39.0	2.6	237	5	2	1	0
8825	31.5	2.2	194	7	3	1	0
8826	23.6	2.7	250	5	2	1	0
8827	34.6	2.8	259	5	3	1	0
8828	45.8	2.6	238	4	3	0	1
8829	27.7	2.6	238	4	2	1	1
8830	25.1	2.9	267	4	3	1	1
8831	48.3	3.5	325	6	3	1	1
8832	59.0	3.8	353	6	3	0	1
8833	54.8	3.8	350	6	4	1	1
8834	29.3	3.4	319	6	4	0	0
8835	22.8	2.5	227	5	3	1	0
8836	23.6	3.0	273	5	3	1	0
8837	10.9	2.9	265	5	3	1	0
8838	13.0	2.6	239	5	3	1	1
8839	23.8	2.7	249	6	3	0	0
8840	27.7	3.2	292	6	3	1	0
8841	25.0	3.3	302	6	3	1	0
8842	28.9	3.2	292	7	4	1	0
8843	28.9	3.3	302	7	3	1	1
8844	36.3	3.3	292	8	3	1	1
8845	42.6	3.1	286	6	3	1	0
8846	36.8	3.2	289	7	3	1	0
8847	47.4	3.2	296	6	3	1	0
8848	27.4	2.7	248	5	3	1	1
8849	26.7	4.7	437	9	5	1	0
8850	26.4	3.4	313	8	4	1	0
8851	35.1	3.3	296	7	4	1	0
8852	22.5	2.5	231	6	2	0	0
8853	55.3	3.2	288	7	3	1	0
8854	32.3	3.4	303	6	3	2	1
8855	18.4	3.3	301	7	4	1	0
8856	29.6	3.1	287	7	3	1	0
8857	22.6	3.3	302	7	3	1	1
8858	23.1	3.2	292	7	3	1	1
8859	19.3	2.8	263	5	2	0	0
8860	38.4	2.4	213	6	3	1	1
8861	22.4	2.9	263	6	4	0	1
8862	22.3	3.9	347	8	5	1	1
8863	26.0	3.4	309	6	4	1	0
8864	3.0	12.4	1144	20	13	3	0
8865	39.7	10.0	905	21	13	3	1
8866	41.3	11.8	1084	22	13	2	1
8867	48.0	17.0	1600	25	14	2	0
8868	27.7	16.2	1521	24	13	2	0
8869	20.4	10.7	996	17	10	3	0
8870	21.3	9.2	858	15	9	2	0
8871	29.3	6.6	610	13	8	1	0
8872	30.9	6.9	635	12	7	1	1
8873	3.0	4.4	398	9	6	1	1
8874	28.9	3.8	352	7	4	1	0
8875	2.5	3.4	303	6	3	2	1
8876	6.9	3.3	301	7	4	1	0
8877	6.6	3.1	287	7	3	1	0
8878	4.9	4.3	399	9	5	0	0
8879	1.3	3.2	290	6	4	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8880	4.4	2.8	256	5	3	0	0
8881	6.3	3.7	344	6	5	1	0
8882	0.9	2.5	224	5	3	2	0
8883	13.8	3.4	307	6	4	2	0
8884	4.4	2.4	219	4	2	0	0
8885	2.8	2.1	190	3	2	1	0
8886	3.6	2.9	255	6	4	1	1
8887	6.7	3.7	329	8	5	1	0
8888	2.5	3.5	318	7	4	1	0
8889	9.0	2.6	238	5	3	0	0
8890	9.6	3.5	318	6	5	1	0
8891	25.3	4.4	411	7	4	1	0
8892	19.2	3.8	353	6	4	0	1
8893	2.8	3.3	309	7	4	0	0
8894	5.5	3.6	335	7	4	0	0
8895	12.7	4.1	381	8	5	1	0
8896	17.2	4.8	443	8	4	0	1
8897	35.3	4.7	431	8	5	1	1
8898	17.3	3.4	306	9	5	1	0
8899	29.0	4.5	411	7	5	1	1
8900	24.2	3.9	365	6	4	1	0
8901	12.2	3.9	364	6	3	1	1
8902	10.0	4.2	382	7	4	1	1
8903	16.0	3.8	346	6	4	1	1
8904	29.8	4.0	371	8	4	0	0
8905	16.8	4.2	387	7	4	1	0
8906	22.9	4.1	387	6	4	1	0
8907	27.1	3.6	323	8	4	1	1
8908	13.5	4.1	370	9	4	1	0
8909	25.8	5.1	474	8	5	1	0
8910	23.2	5.6	515	10	5	1	0
8911	27.0	6.0	558	9	5	0	1
8912	23.7	6.0	563	10	5	1	0
8913	24.7	5.9	555	10	5	1	0
8914	38.1	5.8	541	10	5	1	0
8915	33.2	4.7	432	9	5	1	0
8916	28.2	6.0	555	10	5	1	0
8917	28.1	5.8	544	9	5	0	0
8918	27.0	5.5	515	9	5	1	1
8919	23.9	5.8	550	9	5	0	0
8920	31.1	6.0	565	9	5	1	0
8921	25.0	5.6	517	9	5	0	1
8922	16.1	5.3	494	8	5	1	1
8923	13.3	4.7	437	8	4	0	1
8924	21.1	4.7	440	8	4	0	0
8925	13.6	4.6	428	7	4	1	0
8926	11.7	4.3	397	7	4	1	0
8927	10.3	3.5	325	6	4	1	0
8928	14.4	4.2	387	9	4	1	0
8929	19.1	4.1	380	8	4	1	0
8930	16.9	4.1	368	8	4	1	1
8931	16.2	4.5	410	8	5	1	1
8932	22.1	3.1	281	8	4	0	0
8933	5.0	4.1	378	8	4	0	0
8934	30.7	4.2	381	8	3	1	1
8935	13.3	3.5	313	7	4	1	1
8936	12.3	3.9	360	7	5	0	1
8937	20.2	4.3	393	7	4	1	1
8938	22.5	4.5	418	7	5	0	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8939	24.6	4.6	428	7	5	1	0
8940	38.4	4.9	455	8	5	0	0
8941	38.4	4.0	366	8	5	1	0
8942	34.4	3.4	299	8	4	1	1
8943	25.2	4.2	392	7	4	0	0
8944	31.2	4.3	393	7	4	1	1
8945	14.6	4.3	395	7	4	1	0
8946	27.1	3.8	346	6	4	1	1
8947	26.0	4.9	455	8	5	0	0
8948	14.7	4.0	366	8	5	1	0
8949	31.3	3.4	299	8	4	1	1
8950	27.2	4.1	373	9	4	1	0
8951	33.0	4.1	372	9	4	1	0
8952	14.8	4.1	375	9	4	0	0
8953	14.0	4.1	385	9	4	0	0
8954	13.4	3.7	333	9	4	0	1
8955	14.0	4.0	358	9	5	0	1
8956	28.0	3.3	310	7	3	0	0
8957	20.7	3.3	304	6	3	0	0
8958	23.8	3.3	305	6	3	0	0
8959	23.5	3.3	308	6	3	0	0
8960	27.0	3.4	313	6	3	0	0
8961	25.9	3.4	319	7	3	0	0
8962	24.9	3.3	309	6	3	1	0
8963	22.7	3.3	301	7	3	1	1
8964	21.8	3.2	299	6	3	1	0
8965	2.9	2.5	229	4	3	1	0
8966	43.8	2.1	195	4	2	0	0
8967	7.5	2.1	192	4	2	0	0
8968	2.7	1.6	146	3	2	0	0
8969	4.7	1.7	158	3	2	0	1
8970	9.2	2.1	189	4	2	1	0
8971	5.0	2.0	178	4	2	1	0
8972	2.7	1.7	152	4	2	0	0
8973	1.0	1.8	161	4	2	1	0
8974	7.3	1.8	167	4	1	0	0
8975	2.7	1.3	124	3	1	0	0
8976	5.6	1.8	159	3	2	1	1
8977	4.8	1.2	110	2	2	0	0
8978	1.0	0.0	0	0	0	0	0
8979	4.5	0.0	3	0	0	0	0
8980	2.1	1.0	92	2	1	1	0
8981	16.3	1.2	108	3	2	1	0
8982	1.0	2.3	212	5	3	0	0
8983	20.2	1.7	147	4	2	1	1
8984	10.7	1.8	167	4	1	0	0
8985	4.0	2.2	201	4	2	0	0
8986	3.4	2.0	178	4	2	1	0
8987	4.6	1.9	173	4	2	0	0
8988	4.6	1.7	147	4	2	1	1
8989	1.2	1.8	167	4	1	0	0
8990	3.1	2.2	201	4	2	0	0
8991	35.0	3.7	337	7	4	1	0
8992	39.8	4.1	390	7	3	0	0
8993	32.4	4.6	428	7	4	1	1
8994	48.2	5.0	462	7	5	0	1
8995	61.6	5.0	462	7	5	0	1
8996	46.9	5.4	504	8	5	1	0
8997	46.0	6.1	572	12	6	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8998	29.9	6.4	590	12	5	1	1
8999	28.6	6.4	590	12	5	1	1
9000	8.0	4.4	402	6	4	1	1
9001	31.8	4.7	442	8	4	1	0
9002	18.6	7.0	655	11	7	1	0
9003	22.5	11.4	1080	17	10	0	0
9004	22.0	8.2	765	13	7	1	1
9005	30.4	4.0	371	6	4	0	1
9006	36.6	4.0	369	6	4	1	1
9007	32.6	4.1	380	6	4	1	0
9008	23.5	4.0	375	6	4	1	0
9009	18.5	4.1	376	7	4	1	0
9010	27.6	4.7	427	8	5	1	1
9011	21.9	5.1	474	7	4	1	2
9012	25.5	4.7	438	7	4	1	2
9013	26.1	4.1	382	6	4	1	1
9014	27.4	4.2	385	6	4	0	1
9015	17.3	3.5	324	6	4	1	0
9016	14.7	3.6	331	7	4	1	0
9017	22.0	4.0	377	6	4	0	1
9018	21.2	3.8	355	7	4	1	0
9019	18.7	3.6	334	6	4	1	0
9020	27.3	3.4	318	6	4	1	0
9021	8.6	3.6	333	7	4	1	1
9022	15.5	3.8	352	6	4	1	1
9023	14.1	4.0	363	7	5	1	0
9024	14.7	4.1	380	8	5	1	0
9025	18.3	4.3	393	7	4	1	0
9026	17.5	4.2	385	7	4	1	0
9027	19.2	4.1	377	7	5	1	0
9028	14.1	4.1	381	8	5	1	0
9029	27.2	5.5	506	9	6	1	0
9030	24.7	4.7	432	9	5	1	0
9031	31.0	4.3	395	8	5	1	0
9032	18.2	5.0	456	11	6	1	0
9033	17.7	5.1	466	12	6	1	1
9034	24.4	4.8	439	11	5	1	1
9035	31.2	5.6	515	11	6	1	1
9036	27.0	4.8	444	9	5	0	1
9037	24.1	4.0	371	8	4	0	1
9038	32.1	4.9	452	9	5	1	1
9039	28.0	1.1	102	2	1	0	0
9040	20.1	2.0	185	3	2	1	0
9041	23.9	5.0	457	9	5	1	1
9042	23.5	5.8	534	11	6	1	0
9043	49.5	6.3	590	11	6	1	0
9044	34.0	5.6	520	10	6	1	0
9045	51.1	5.9	539	12	6	1	1
9046	35.3	6.5	594	13	7	2	0
9047	47.2	5.1	472	10	6	0	0
9048	30.8	5.1	472	10	6	0	0
9049	35.0	3.1	269	9	5	1	0
9050	44.3	3.1	269	9	5	1	0
9051	23.2	3.1	269	9	5	1	0
9052	32.0	2.9	260	9	4	0	0
9053	30.5	3.0	270	9	4	1	0
9054	25.9	2.7	239	8	3	1	0
9055	17.0	2.4	218	7	3	1	0
9056	21.6	1.6	139	3	2	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9057	26.4	1.0	85	3	1	0	0
9058	27.2	0.9	81	3	2	0	0
9059	32.3	1.0	85	2	1	0	1
9060	25.0	1.0	87	3	2	0	0
9061	25.0	1.2	104	3	2	0	0
9062	25.0	1.2	104	3	2	0	0
9063	3.8	1.2	100	3	2	1	0
9064	3.0	1.2	98	4	2	0	1
9065	8.5	1.3	111	4	3	1	1
9066	8.5	1.4	116	4	3	1	0
9067	4.8	1.4	116	5	3	1	0
9068	2.8	1.1	94	3	3	1	0
9069	5.8	1.2	99	4	2	0	0
9070	1.6	0.9	82	3	2	0	0
9071	1.5	2.2	194	6	3	1	0
9072	3.0	0.9	75	3	2	1	0
9073	7.0	1.0	86	3	2	0	0
9074	6.0	0.8	68	2	1	0	0
9075	3.0	1.3	117	3	1	1	0
9076	31.0	1.4	126	3	2	0	0
9077	26.1	1.6	141	3	2	0	1
9078	27.7	1.5	137	3	2	0	1
9079	22.8	1.1	100	2	1	0	0
9080	27.9	1.7	159	2	1	0	1
9081	40.0	1.7	160	3	2	0	0
9082	38.7	1.1	102	2	1	0	0
9083	27.6	1.3	110	4	3	1	0
9084	33.8	1.4	116	4	3	1	0
9085	22.7	1.4	116	5	3	1	0
9086	23.7	1.5	125	6	4	1	0
9087	25.7	1.7	146	5	4	0	0
9088	23.4	1.8	157	6	4	0	0
9089	22.1	1.9	159	7	4	0	0
9090	46.7	1.9	171	3	1	0	1
9091	42.8	1.9	178	3	1	1	1
9092	49.2	2.0	182	3	2	1	1
9093	26.9	2.0	182	3	2	0	1
9094	49.3	1.8	162	4	2	0	1
9095	33.2	2.0	184	3	2	0	0
9096	58.5	2.2	199	3	2	1	1
9097	51.8	2.2	205	3	2	1	0
9098	46.0	2.2	207	4	2	0	0
9099	41.0	2.2	207	3	2	0	0
9100	40.0	2.2	202	3	2	0	0
9101	57.9	2.1	194	4	2	1	1
9102	45.4	2.1	194	4	2	0	1
9103	76.3	2.0	181	4	2	1	1
9104	43.0	1.8	169	3	2	0	0
9105	23.2	1.7	161	3	2	0	0
9106	46.9	1.8	165	4	1	1	0
9107	25.0	1.8	167	4	2	0	0
9108	47.7	1.8	172	3	2	0	0
9109	44.6	2.2	202	5	3	0	0
9110	39.8	2.4	220	5	2	0	0
9111	25.7	2.8	252	6	2	0	1
9112	43.4	1.9	177	4	2	0	0
9113	31.8	1.6	148	3	2	1	1
9114	31.8	1.6	148	3	2	1	1
9115	22.9	1.7	149	3	2	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9116	64.0	1.7	151	3	2	1	1
9117	29.4	1.6	146	3	2	0	0
9118	22.9	1.5	139	3	1	0	0
9119	22.6	1.6	146	3	2	0	0
9120	23.7	1.3	127	2	1	0	0
9121	23.1	2.0	183	3	1	1	0
9122	31.0	1.8	165	3	2	0	0
9123	48.1	1.6	148	3	1	0	1
9124	43.9	1.6	150	3	1	0	1
9125	24.0	1.8	165	3	2	0	0
9126	47.6	1.6	148	3	1	0	1
9127	38.6	1.6	150	3	1	0	1
9128	42.8	1.6	145	4	1	0	0
9129	56.6	1.6	146	4	1	0	0
9130	31.9	1.9	175	3	1	0	1
9131	50.0	1.9	181	3	1	0	0
9132	50.0	2.0	185	4	1	0	1
9133	59.1	2.1	193	4	2	0	0
9134	62.6	2.1	197	4	2	0	1
9135	37.2	2.1	198	4	1	0	1
9136	31.0	1.4	126	4	1	0	1
9137	26.8	1.8	168	4	1	0	0
9138	61.3	2.0	192	3	2	0	0
9139	44.0	2.1	195	3	2	0	0
9140	39.9	2.1	194	4	2	0	0
9141	38.3	2.1	197	4	2	0	0
9142	42.1	2.2	197	4	2	1	1
9143	26.1	2.1	196	4	2	0	0
9144	31.6	2.1	194	4	2	1	1
9145	53.3	2.1	196	4	2	1	0
9146	50.0	2.0	183	4	2	0	0
9147	23.2	1.7	154	4	2	1	0
9148	21.4	1.7	153	3	2	1	1
9149	39.3	1.9	174	3	2	1	1
9150	39.5	2.0	180	4	2	0	1
9151	60.3	2.0	180	4	2	1	0
9152	29.2	1.9	174	4	2	1	1
9153	30.0	1.9	174	4	2	0	0
9154	26.7	2.0	180	4	2	0	0
9155	32.3	1.9	172	4	2	0	1
9156.00	35.50	1.97	179.70	4.40	2.10	0.00	0.40
9157	35.5	2.3	211	5	2	1	0
9158	39.7	2.3	215	4	2	0	0
9159	55.3	2.4	221	4	2	0	0
9160	33.1	2.5	230	5	2	0	0
9161	37.9	2.4	229	4	2	0	0
9162	40.0	2.5	235	5	2	0	1
9163	53.2	2.6	235	4	2	1	1
9164	47.4	2.5	235	4	2	0	1
9165	57.6	2.5	233	4	2	0	1
9166	40.1	2.3	212	4	3	0	1
9167	32.5	1.8	164	4	2	0	0
9168	37.5	2.3	216	4	2	1	0
9169	38.7	2.3	213	4	2	0	0
9170	31.1	2.3	215	4	2	0	0
9171	49.5	2.4	226	4	2	1	0
9172	29.7	3.0	273	5	3	1	0
9173	47.4	3.1	282	5	3	1	1
9174	65.6	2.9	268	5	3	0	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9175	30.6	2.9	267	5	3	0	0
9176	35.8	2.7	242	5	3	0	1
9177	42.3	2.1	187	5	3	0	0
9178	38.0	2.5	227	5	3	0	0
9179	100.0	2.8	254	4	3	1	1
9180	67.2	2.7	253	5	3	1	0
9181	61.8	2.7	252	5	3	0	0
9182	85.1	2.7	249	5	3	1	0
9183	45.6	2.7	248	5	3	0	0
9184	29.1	2.7	250	5	3	0	0
9185	34.1	2.7	243	6	3	0	1
9186	30.0	2.6	245	5	3	0	0
9187	29.1	2.7	247	5	3	0	0
9188	15.9	2.7	244	5	3	1	0
9189	33.8	2.6	233	6	3	0	0
9190	31.4	2.9	268	6	3	0	0
9191	32.4	3.0	277	6	3	1	0
9192	56.5	3.1	286	7	3	0	0
9193	77.0	3.1	283	5	3	0	1
9194	49.9	3.0	278	6	3	0	0
9195	20.6	3.0	277	6	3	0	1
9196	44.7	3.1	285	6	3	0	1
9197	42.2	3.2	293	7	3	0	1
9198	35.3	3.2	302	6	3	0	0
9199	27.1	2.2	189	6	3	1	1
9200	69.9	3.1	290	6	3	1	0
9201	66.8	3.1	286	6	3	1	0
9202	78.5	3.1	284	6	3	0	1
9203	65.8	3.1	282	6	3	1	1
9204	49.9	3.1	281	6	3	1	1
9205	42.5	3.0	274	6	3	0	1
9206	58.7	3.0	272	6	3	0	1
9207	47.9	3.0	269	6	3	1	1
9208	34.3	2.9	263	6	3	0	0
9209	32.1	2.9	264	6	3	0	1
9210	39.9	2.9	264	6	3	1	0
9211	41.1	2.9	261	7	2	1	1
9212	43.5	2.8	252	5	3	1	1
9213	41.5	2.6	238	5	3	1	1
9214	25.6	2.8	258	5	3	1	0
9215	31.0	3.1	289	6	4	0	0
9216	39.3	3.0	280	6	3	0	0
9217	28.0	2.6	244	5	3	0	0
9218	29.4	3.3	306	6	4	0	1
9219	40.1	2.2	203	5	3	0	0
9220	31.3	1.5	136	4	2	0	1
9221	36.2	3.6	323	9	5	1	1
9222	32.5	2.3	205	5	3	1	0
9223	42.8	2.2	197	6	3	0	0
9224	36.6	2.2	198	6	3	0	0
9225	36.6	2.2	200	6	3	0	0
9226	19.1	2.2	202	5	3	0	0
9227	32.5	2.2	203	5	3	0	0
9228	42.9	2.2	205	5	3	0	0
9229	19.2	2.2	207	5	3	0	0
9230	24.9	2.3	208	5	3	0	0
9231	37.4	2.3	210	5	3	0	0
9232	24.8	2.3	212	5	3	0	0
9233	29.9	2.3	214	4	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9234	40.0	2.3	215	4	3	0	0
9235	31.3	2.3	217	4	3	0	0
9236	35.2	2.7	246	5	3	0	0
9237	47.0	2.9	262	6	4	1	0
9238	40.6	2.6	238	5	4	0	0
9239	26.3	2.4	215	4	3	0	0
9240	0.9	2.3	208	4	3	1	1
9241	31.5	2.2	201	4	3	1	1
9242	42.0	2.2	201	4	3	1	1
9243	31.3	2.2	201	4	3	1	1
9244	36.9	2.2	201	4	3	1	1
9245	36.9	2.2	201	4	3	1	1
9246	17.5	2.2	201	4	3	1	1
9247	34.8	2.2	201	4	3	1	1
9248	31.0	2.2	201	4	3	1	1
9249	32.0	2.2	201	4	3	1	1
9250	38.5	2.2	201	4	3	1	1
9251	2.0	2.2	201	4	3	1	1
9252	4.6	2.2	201	4	3	1	1
9253	11.2	2.2	201	4	3	1	1
9254	2.1	2.3	208	5	3	0	1
9255	3.7	1.5	130	4	2	1	1
9256	8.4	1.4	122	3	2	1	1
9257	6.0	1.3	120	4	2	1	0
9258	4.1	1.2	105	3	2	0	1
9259	1.4	1.3	112	3	2	0	0
9260	6.2	1.1	93	3	2	0	0
9261	6.5	1.1	93	3	2	0	1
9262	7.5	1.0	89	3	2	0	0
9263	1.4	1.0	89	3	2	1	0
9264	2.0	0.9	81	3	2	1	0
9265	4.8	0.8	69	3	2	1	0
9266	3.0	0.6	54	2	1	0	0
9267	5.9	0.7	58	2	1	1	1
9268	4.7	0.8	68	2	1	1	0
9269	4.3	0.8	70	3	1	0	0
9270	4.8	0.9	83	2	1	0	0
9271	5.9	1.4	121	4	3	0	0
9272	29.4	1.4	122	3	2	1	1
9273	32.9	1.6	141	3	2	1	1
9274	36.2	1.6	141	3	2	1	1
9275	18.9	1.6	144	4	2	1	1
9276	34.2	1.8	156	4	2	1	0
9277	51.6	1.8	163	4	2	1	1
9278	22.6	1.5	133	4	2	0	0
9279	48.6	1.5	132	4	2	0	0
9280	16.6	1.9	172	4	2	0	0
9281	46.5	2.0	180	5	2	0	0
9282	67.0	2.0	180	5	2	0	0
9283	48.0	2.0	178	4	3	0	1
9284	34.8	1.9	177	4	1	0	1
9285	36.5	1.9	179	4	1	1	0
9286	28.6	2.0	182	3	2	1	0
9287	23.8	1.9	178	3	2	1	0
9288	61.3	1.9	174	4	2	0	0
9289	14.8	2.1	188	4	3	1	0
9290	57.3	2.3	213	4	2	1	1
9291	47.3	2.3	208	5	3	1	0
9292	50.8	2.3	207	5	3	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9293	37.7	2.2	205	4	3	1	0
9294	35.2	2.2	197	5	2	1	0
9295	18.7	2.1	194	5	2	1	0
9296	35.5	2.1	190	4	2	0	0
9297	25.1	1.8	166	4	3	0	0
9298	23.5	1.8	159	4	3	0	1
9299	18.5	2.2	197	5	3	0	1
9300	40.4	2.2	201	5	2	1	1
9301	46.3	2.3	205	5	2	1	1
9302	48.1	2.3	210	4	3	1	1
9303	32.6	2.3	206	4	2	1	1
9304	29.0	2.2	201	4	3	0	1
9305	25.0	2.2	195	4	3	0	1
9306	37.5	2.1	191	5	3	1	1
9307	31.5	2.2	192	6	3	1	1
9308	46.2	2.2	197	6	3	1	1
9309	27.2	2.2	197	5	2	1	0
9310	50.1	2.2	196	6	2	1	0
9311	51.6	2.2	195	6	2	0	1
9312	42.2	2.5	226	5	3	1	0
9313	45.3	2.5	229	6	3	1	0
9314	53.4	2.2	203	6	3	0	0
9315	36.0	2.2	183	7	3	1	1
9316	38.2	2.2	195	4	3	0	1
9317	21.6	2.1	191	5	3	1	0
9318	20.9	2.2	192	6	3	1	0
9319	33.0	2.1	180	5	3	1	1
9320	44.4	1.9	166	5	2	0	1
9321	18.8	1.9	168	5	2	1	1
9322	37.0	2.4	214	6	3	1	1
9323	60.8	2.4	218	5	3	0	0
9324	23.6	2.4	221	5	3	1	0
9325	28.9	2.5	221	5	3	1	1
9326	18.5	2.4	211	5	3	1	1
9327	65.3	2.3	205	6	3	0	0
9328	14.4	1.9	170	5	3	0	0
9329	20.4	2.3	205	5	3	1	1
9330	48.4	2.3	209	6	3	1	0
9331	39.4	2.5	221	6	3	0	1
9332	45.8	2.8	245	6	4	1	1
9333	45.2	2.8	254	7	4	1	0
9334	19.8	2.7	240	7	4	1	0
9335	0.9	1.5	130	4	2	1	0
9336	32.6	1.5	138	4	2	0	0
9337	49.5	1.9	159	5	3	1	1
9338	61.8	1.9	167	5	3	0	0
9339	28.6	1.9	170	5	3	0	0
9340	27.4	2.1	188	5	3	1	0
9341	24.3	2.3	207	6	3	0	0
9342	34.9	2.1	186	6	3	1	0
9343	24.5	2.1	181	6	3	1	0
9344	21.1	2.1	183	6	3	1	0
9345	25.3	2.0	176	5	3	0	0
9346	23.9	1.9	174	5	3	0	0
9347	19.3	1.4	125	4	2	0	0
9348	8.4	1.5	130	5	2	0	0
9349	3.8	1.8	147	5	3	1	1
9350	4.6	1.9	167	6	3	0	0
9351	3.6	2.7	234	8	5	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9352	2.5	3.2	288	8	5	1	0
9353	2.1	2.0	173	5	3	1	0
9354	2.9	1.5	122	4	3	1	1
9355	1.8	1.2	105	4	2	1	0
9356	3.4	2.5	216	7	5	1	0
9357	2.7	1.2	100	5	4	0	0
9358	3.5	1.5	120	6	4	1	0
9359	5.0	1.5	120	6	4	1	0
9360	1.7	1.2	108	3	2	0	0
9361	31.3	1.3	113	4	2	0	0
9362	4.0	2.4	219	6	3	1	0
9363	21.9	2.8	249	7	4	0	0
9364	33.1	2.9	254	7	4	1	1
9365	23.7	2.2	192	6	3	1	1
9366	6.4	2.2	190	6	3	1	1
9367	35.4	1.7	145	5	2	1	0
9368	26.5	1.5	135	5	2	0	0
9369	20.7	1.5	134	4	1	0	0
9370	22.1	3.7	334	7	5	2	0
9371	28.2	4.1	378	7	5	1	0
9372	37.7	4.4	405	8	6	1	0
9373	23.0	4.1	368	8	6	1	0
9374	48.0	3.7	333	8	5	1	0
9375	31.8	3.6	322	7	5	1	0
9376	34.7	3.2	283	6	5	2	0
9377	37.1	3.3	291	9	5	2	0
9378	37.7	3.4	298	10	5	1	0
9379	18.6	2.8	250	8	4	1	0
9380	44.1	2.5	224	7	4	1	0
9381	29.9	2.4	219	5	3	1	0
9382	23.2	2.5	214	7	4	1	1
9383	31.5	2.6	231	7	4	1	0
9384	22.2	2.8	253	7	4	1	0
9385	46.4	2.7	241	7	4	1	0
9386	23.9	2.6	234	7	3	1	0
9387	24.5	2.7	238	7	4	1	0
9388	32.6	2.8	249	7	3	1	0
9389	31.0	2.9	259	8	3	1	0
9390	23.1	2.5	225	8	4	0	0
9391	34.9	7.0	655	8	7	2	0
9392	48.6	14.4	1371	11	11	3	0
9393	15.9	9.9	939	9	7	2	0
9394	31.6	2.6	236	7	3	1	0
9395	27.9	4.3	381	11	6	2	0
9396	28.4	3.6	322	10	6	1	0
9397	32.9	2.5	231	5	3	1	0
9398	29.0	2.4	213	5	3	1	0
9399	44.3	2.3	205	5	3	1	0
9400	30.9	2.2	199	5	2	1	0
9401	28.2	2.2	193	6	2	1	0
9402	19.7	2.1	186	6	2	1	1
9403	51.1	2.2	191	7	3	1	0
9404	17.3	2.5	223	7	3	1	0
9405	31.3	2.5	229	6	3	0	0
9406	37.7	2.5	229	6	3	0	0
9407	44.1	2.5	213	7	3	1	1
9408	15.4	3.0	261	8	4	1	1
9409	31.4	3.7	331	10	5	1	0
9410	13.4	2.2	195	6	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9411	30.3	1.9	166	6	3	1	0
9412	41.1	3.3	295	9	4	1	1
9413	43.1	2.6	233	8	3	1	0
9414	24.5	2.6	236	6	3	1	0
9415	50.5	3.0	271	8	4	1	0
9416	14.7	2.0	176	5	2	1	0
9417	14.3	1.7	147	4	2	1	0
9418	36.0	2.2	199	6	3	1	0
9419	38.0	2.2	193	7	3	1	0
9420	43.9	1.7	149	7	3	0	0
9421	49.4	2.6	227	7	4	1	0
9422	47.6	2.6	230	7	3	1	0
9423	40.4	2.7	235	8	4	1	0
9424	42.8	2.8	240	8	5	1	0
9425	35.0	4.6	403	13	6	2	1
9426	26.4	4.3	370	14	6	2	1
9427	32.3	4.9	434	15	7	2	0
9428	89.5	4.8	428	14	7	2	0
9429	28.0	4.1	359	13	6	2	1
9430	8.8	5.3	471	13	7	2	0
9431	43.4	6.7	609	15	7	2	0
9432	48.9	6.9	620	16	8	2	1
9433	80.8	6.8	612	16	9	3	0
9434	56.1	6.8	606	16	9	3	0
9435	29.3	6.0	536	14	8	2	0
9436	30.7	4.5	401	10	6	2	0
9437	30.3	3.8	343	9	4	2	0
9438	26.1	2.8	253	7	4	1	0
9439	27.8	3.1	286	6	4	1	0
9440	26.6	2.4	219	4	3	1	1
9441	35.8	2.0	174	3	2	1	1
9442	5.7	1.7	150	3	2	1	1
9443	2.2	1.4	126	3	2	0	0
9444	3.6	1.3	114	3	2	1	0
9445	24.5	1.7	142	5	3	2	0
9446	27.4	11.1	969	33	18	6	0
9447	24.2	13.6	1188	40	22	7	0
9448	38.7	15.4	1334	46	26	9	0
9449	37.6	17.1	1473	53	30	10	0
9450	34.4	18.8	1608	60	33	12	0
9451	19.7	20.0	1722	61	35	12	0
9452	33.4	14.8	1272	48	26	9	0
9453	23.8	10.7	915	35	20	7	0
9454	29.1	7.4	628	25	14	5	0
9455	43.6	6.4	550	20	12	4	0
9456	30.0	5.7	485	17	10	4	0
9457	23.5	4.8	415	14	8	3	0
9458	27.6	4.5	393	13	7	1	1
9459	34.0	5.9	510	17	10	3	0
9460	46.4	5.5	480	16	9	3	0
9461	24.5	4.2	378	12	6	1	0
9462	38.5	4.3	376	12	7	2	0
9463	73.4	2.9	237	12	7	1	0
9464	49.0	3.3	280	11	6	2	0
9465	15.9	4.3	384	11	6	2	0
9466	62.0	4.4	394	12	6	2	0
9467	49.8	4.7	424	12	6	1	0
9468	30.6	4.6	409	11	6	2	1
9469	43.7	4.5	398	11	6	2	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9470	47.7	4.3	388	10	5	2	0
9471	51.6	4.4	399	11	5	2	0
9472	59.0	4.7	422	11	6	1	0
9473	33.6	3.8	344	10	5	1	0
9474	30.3	3.8	343	9	4	2	0
9475	38.7	3.6	329	9	4	1	0
9476	25.4	3.4	308	8	4	1	0
9477	40.5	3.3	302	8	4	1	0
9478	41.4	3.3	296	8	4	1	0
9479	52.8	3.3	295	6	4	1	1
9480	64.4	3.6	326	9	4	1	0
9481	55.8	4.2	378	10	5	1	0
9482	60.4	4.4	405	8	5	1	0
9483	48.9	4.3	386	8	5	1	1
9484	56.1	4.0	369	8	4	1	0
9485	47.7	3.9	356	8	4	1	1
9486	36.5	4.0	366	7	5	1	1
9487	40.3	3.8	353	7	4	1	0
9488	29.3	3.8	346	7	4	1	0
9489	30.2	3.9	362	7	4	1	0
9490	28.7	4.0	367	7	4	1	0
9491	17.0	4.1	378	7	5	1	0
9492	34.0	4.1	368	9	5	1	0
9493	18.6	4.0	362	8	5	1	0
9494	29.0	3.9	354	8	5	1	0
9495	48.2	3.9	351	8	5	1	0
9496	32.7	3.7	333	7	5	1	1
9497	35.7	3.4	292	9	5	2	1
9498	33.6	3.8	338	9	5	1	1
9499	27.3	3.6	323	9	5	1	0
9500	30.3	2.9	258	7	3	1	0
9501	43.6	2.6	236	7	3	1	0
9502	33.4	5.0	447	12	7	2	0
9503	25.4	4.6	415	11	6	2	0
9504	26.2	4.5	405	11	6	0	0
9505	23.4	3.8	338	9	5	1	0
9506	59.9	3.6	318	9	5	2	0
9507	60.0	3.2	279	9	5	2	0
9508	45.0	2.4	206	9	5	1	0
9509	26.0	5.0	451	12	7	2	0
9510	35.4	5.0	454	10	7	2	0
9511	16.8	3.8	342	8	5	1	1
9512	36.4	3.4	304	8	5	0	1
9513	27.0	3.3	290	8	5	1	0
9514	10.9	2.9	259	7	4	1	0
9515	17.1	2.5	225	6	4	1	0
9516	12.5	2.0	176	4	3	1	1
9517	10.8	1.8	159	5	3	1	0
9518	45.6	1.8	159	5	2	1	1
9519	27.2	1.8	148	6	3	1	1
9520	33.7	1.8	159	5	2	1	1
9521	26.4	1.8	148	6	3	1	1
9522	27.2	2.3	202	7	4	1	0
9523	23.9	2.3	207	6	3	0	0
9524	22.3	2.5	224	4	4	1	0
9525	13.6	2.4	225	4	3	0	0
9526	22.6	1.8	162	4	2	0	0
9527	19.7	2.5	224	4	3	1	0
9528	30.3	2.4	220	4	3	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9529	17.7	2.4	217	4	3	1	0
9530	20.7	2.3	215	4	2	0	0
9531	41.2	2.4	214	4	2	1	1
9532	22.0	2.1	196	4	2	1	0
9533	18.6	2.3	208	4	3	1	0
9534	24.4	3.1	280	5	3	1	1
9535	22.3	2.9	262	5	3	1	0
9536	37.5	2.6	240	5	3	1	0
9537	14.4	2.6	241	5	3	1	0
9538	35.9	2.7	242	5	3	1	0
9539	50.0	2.7	248	5	3	1	0
9540	32.7	2.9	265	5	3	1	0
9541	32.1	2.8	252	5	3	1	0
9542	25.7	2.8	253	5	3	1	0
9543	45.4	2.8	254	5	3	1	1
9544	24.1	2.9	255	5	3	2	1
9545	34.8	2.8	251	5	3	1	1
9546	22.3	2.8	253	5	3	1	1
9547	31.4	2.4	214	5	3	1	0
9548	18.3	2.8	249	5	4	1	0
9549	17.5	3.3	300	7	4	1	0
9550	23.9	3.2	292	8	4	1	0
9551	27.0	3.1	284	7	4	1	0
9552	16.8	3.0	269	5	4	1	0
9553	22.3	2.5	215	6	4	1	1
9554	33.9	2.9	257	6	4	1	0
9555	15.9	2.9	263	5	4	1	0
9556	42.8	2.7	247	5	3	1	0
9557	28.5	3.0	278	5	4	1	0
9558	41.7	3.6	326	6	5	1	0
9559	28.4	3.9	354	6	5	1	0
9560	33.2	4.0	364	7	5	2	0
9561	37.5	4.0	362	7	5	1	0
9562	64.9	3.9	362	6	5	1	0
9563	50.0	3.7	337	7	4	1	0
9564	20.8	3.2	289	6	4	1	1
9565	62.8	3.5	317	6	4	1	1
9566	48.6	3.5	319	6	4	2	0
9567	23.9	3.4	309	6	4	1	1
9568	36.0	3.8	348	7	4	1	0
9569	17.5	3.5	318	6	4	2	0
9570	22.6	3.5	322	6	4	1	0
9571	23.4	3.6	324	7	4	1	1
9572	30.1	2.8	245	7	4	1	0
9573	26.5	3.4	309	7	4	1	0
9574	23.8	3.4	307	7	4	1	0
9575	17.4	3.4	307	7	4	1	0
9576	31.6	3.3	303	6	4	1	0
9577	31.0	3.2	295	6	4	1	0
9578	27.8	3.2	289	6	4	1	0
9579	30.6	1.8	158	4	3	1	0
9580	33.7	1.6	149	3	2	0	0
9581	25.4	2.8	255	5	3	1	0
9582	29.4	3.0	266	7	4	1	0
9583	32.2	1.6	155	3	1	0	0
9584	19.3	2.3	207	6	3	1	0
9585	23.9	1.8	161	5	2	0	0
9586	36.2	1.1	98	3	1	0	0
9587	27.2	2.4	207	5	4	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9588	56.7	3.0	275	6	4	1	0
9589	35.8	3.1	281	6	4	1	0
9590	28.8	3.1	281	6	4	0	1
9591	29.8	3.0	268	7	4	1	0
9592	15.9	2.9	262	7	4	1	0
9593	35.0	2.9	260	7	4	1	0
9594	30.0	2.8	259	5	3	1	0
9595	21.9	3.0	267	6	4	1	0
9596	27.8	3.4	311	8	4	1	0
9597	20.7	3.2	293	6	4	1	0
9598	29.6	3.3	300	7	4	1	0
9599	23.4	4.9	449	8	5	1	1
9600	17.5	8.2	776	8	7	1	1
9601	33.0	8.9	846	7	7	1	0
9602	53.4	7.4	702	6	6	0	1
9603	50.0	6.9	653	7	6	1	1
9604	19.3	5.0	459	8	6	1	1
9605	18.1	3.7	333	8	6	1	0
9606	42.3	4.2	385	8	6	1	0
9607	32.2	2.9	257	6	4	1	0
9608	28.2	2.2	196	5	3	0	0
9609	29.0	0.0	3	0	0	0	0
9610	37.5	0.1	9	0	0	0	0
9611	30.8	1.1	104	2	1	0	0
9612	24.4	2.6	235	5	3	1	1
9613	22.6	3.0	264	5	4	1	1
9614	44.0	2.8	256	5	4	1	0
9615	42.0	3.0	260	7	4	1	1
9616	49.0	2.9	260	6	4	1	0
9617	20.0	19.2	1799	26	18	5	0
9618	35.0	32.6	3056	42	29	9	0
9619	52.0	24.2	2266	32	21	7	0
9620	32.3	13.3	1240	19	12	4	0
9621	39.2	7.8	725	12	8	2	0
9622	34.6	4.3	392	7	6	1	0
9623	34.1	3.4	312	7	5	1	0
9624	40.2	3.6	334	6	5	1	0
9625	38.4	4.0	361	8	5	1	0
9626	33.7	4.1	375	8	5	2	0
9627	34.8	3.9	358	6	5	1	0
9628	36.0	7.9	729	12	9	2	0
9629	33.0	13.4	1234	21	14	4	1
9630	2.6	2.5	225	6	4	1	0
9631	2.8	2.3	205	6	4	1	1
9632	1.9	3.0	266	7	4	0	1
9633	2.2	2.7	243	6	4	1	0
9634	3.4	2.6	227	6	4	2	0
9635	3.8	2.5	218	7	4	2	0
9636	1.5	2.9	256	7	5	1	1
9637	38.2	2.9	265	6	5	0	0
9638	29.9	2.9	263	7	4	0	0
9639	29.3	2.9	263	7	4	1	0
9640	48.9	3.0	267	7	5	1	0
9641	29.5	2.9	257	7	4	1	0
9642	32.2	3.1	277	7	5	1	0
9643	25.8	3.5	320	8	5	0	0
9644	30.8	3.4	310	7	5	1	0
9645	31.5	3.4	304	7	5	1	0
9646	37.1	3.3	295	8	5	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9647	35.2	3.4	306	7	5	1	0
9648	40.0	3.5	311	8	5	1	0
9649	39.8	3.5	310	8	5	1	0
9650	36.1	2.7	240	6	5	1	0
9651	33.7	3.3	301	6	5	1	0
9652	25.5	3.3	299	6	5	1	0
9653	22.4	3.7	337	7	5	1	0
9654	29.8	3.4	302	7	5	1	0
9655	19.5	3.1	271	8	5	1	0
9656	26.2	3.2	283	6	6	2	0
9657	22.0	3.2	289	6	5	1	0
9658	29.9	3.1	285	6	4	1	0
9659	32.1	3.0	269	7	4	1	0
9660	33.1	2.8	249	7	4	1	0
9661	34.7	3.1	284	6	4	1	0
9662	37.4	3.4	313	6	5	1	0
9663	26.4	3.6	326	7	5	1	0
9664	37.7	3.4	308	7	5	1	0
9665	26.9	3.2	286	6	5	1	0
9666	28.4	3.1	283	7	4	1	0
9667	24.5	3.2	284	7	4	1	1
9668	21.6	2.5	216	7	4	1	0
9669	36.4	2.1	181	7	5	0	0
9670	20.0	3.2	283	7	5	1	0
9671	18.6	3.2	288	7	4	1	0
9672	22.5	3.1	276	6	5	1	0
9673	36.3	3.0	269	6	4	1	0
9674	24.4	3.1	272	7	5	1	1
9675	28.3	3.4	308	7	5	1	0
9676	26.1	3.2	286	7	5	1	1
9677	29.9	2.7	232	8	5	1	0
9678	36.3	3.3	293	8	5	1	0
9679	30.3	3.3	298	6	5	1	0
9680	32.5	3.4	301	7	5	1	1
9681	30.2	3.4	305	6	5	1	1
9682	29.6	3.4	308	8	5	1	0
9683	31.0	3.3	294	8	5	1	0
9684	32.2	3.3	295	7	5	1	0
9685	33.6	2.8	243	7	5	1	0
9686	29.3	2.5	209	8	5	1	1
9687	27.9	2.8	243	8	5	1	1
9688	24.2	3.3	298	8	5	1	0
9689	26.6	3.7	327	9	5	2	0
9690	29.0	3.6	331	7	5	1	0
9691	28.0	3.8	338	8	5	1	1
9692	13.9	3.6	322	7	6	1	0
9693	38.7	3.5	304	6	6	2	1
9694	18.7	3.3	297	7	5	1	0
9695	46.9	3.9	353	9	6	1	0
9696	58.6	5.0	454	9	7	1	0
9697	40.2	3.7	330	7	6	1	0
9698	20.2	3.0	268	7	4	1	0
9699	21.7	3.1	281	6	4	1	1
9700	46.1	3.8	346	8	5	1	0
9701	17.2	5.2	469	11	7	1	0
9702	14.9	5.6	507	12	8	2	0
9703	24.5	3.1	278	7	5	1	0
9704	23.4	3.8	338	8	5	1	1
9705	27.6	3.6	322	7	6	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9706	23.4	3.5	304	6	6	2	1
9707	54.6	3.3	297	7	5	1	0
9708	23.6	2.8	243	8	5	1	1
9709	44.5	3.3	298	8	5	1	0
9710	63.7	2.3	211	5	3	1	0
9711	40.6	2.9	259	7	4	1	0
9712	23.5	3.7	337	7	5	1	0
9713	15.0	5.1	473	7	6	1	0
9714	17.9	4.3	398	6	5	1	1
9715	35.6	3.3	297	5	4	1	1
9716	22.7	3.5	326	5	4	1	0
9717	37.5	3.9	358	6	4	0	1
9718	30.3	3.5	328	5	4	1	0
9719	37.7	3.4	314	5	4	0	1
9720	28.5	3.4	310	5	4	1	1
9721	22.3	3.1	294	4	4	0	0
9722	26.6	2.7	254	4	3	0	0
9723	41.3	2.7	246	4	3	1	0
9724	36.9	2.6	239	4	3	1	0
9725	32.6	2.7	244	4	3	1	1
9726	15.0	2.9	262	4	3	1	1
9727	55.0	3.0	274	5	4	1	1
9728	46.6	3.0	274	6	3	1	1
9729	46.6	3.0	274	6	3	1	1
9730	40.3	3.0	274	6	3	1	1
9731	45.5	3.0	274	6	3	1	1
9732	31.3	3.0	274	6	3	1	1
9733	37.8	3.0	274	6	3	1	1
9734	30.2	3.0	274	6	3	1	1
9735	30.1	2.9	260	6	4	1	0
9736	31.1	2.8	253	5	3	1	0
9737	28.7	2.7	250	5	3	1	0
9738	27.9	2.1	191	6	3	0	0
9739	32.5	3.1	280	6	4	1	1
9740	33.7	3.5	323	7	4	1	0
9741	36.5	3.4	316	6	4	1	0
9742	60.0	3.4	308	5	4	1	0
9743	43.1	3.3	306	6	4	1	0
9744	38.1	3.4	310	6	4	1	0
9745	51.8	3.4	312	6	4	1	0
9746	30.2	3.5	317	6	4	1	0
9747	39.6	3.5	318	7	4	1	0
9748	27.6	3.4	315	5	4	1	0
9749	28.3	3.6	325	6	4	1	0
9750	28.8	3.6	328	6	5	1	0
9751	25.3	3.7	337	6	5	1	0
9752	31.8	3.6	332	6	5	1	1
9753	35.8	3.5	322	6	5	1	1
9754	35.3	3.5	321	6	5	1	1
9755	37.5	3.3	302	5	4	1	0
9756	45.1	2.7	246	5	4	1	0
9757	36.4	3.4	310	6	5	2	0
9758	38.8	3.9	362	6	5	1	0
9759	30.4	3.7	339	6	5	2	0
9760	35.9	3.5	322	6	5	1	0
9761	52.1	3.5	317	6	4	1	0
9762	34.7	3.5	317	6	5	1	0
9763	25.2	3.5	317	6	5	1	0
9764	43.5	3.4	309	5	5	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9765	50.0	3.3	299	6	5	1	0
9766	22.0	2.8	245	6	4	1	0
9767	49.0	3.1	275	7	5	1	0
9768	44.2	3.1	282	6	4	2	0
9769	19.0	3.1	276	6	4	1	1
9770	41.2	3.1	278	5	4	1	1
9771	44.8	2.9	260	6	4	1	0
9772	38.0	2.8	258	6	4	1	0
9773	30.9	2.9	265	5	4	1	0
9774	37.8	3.1	285	5	4	0	0
9775	32.6	3.7	332	7	5	1	0
9776	39.5	3.6	330	7	5	1	0
9777	36.4	3.1	286	6	4	1	0
9778	35.6	2.8	258	6	4	0	0
9779	46.2	2.8	256	6	4	1	0
9780	38.8	2.8	254	6	4	1	0
9781	44.7	4.1	376	7	5	1	1
9782	15.4	3.8	339	7	5	1	1
9783	66.2	3.1	283	6	4	1	0
9784	18.8	3.0	274	6	4	1	0
9785	44.6	3.7	333	7	5	1	0
9786	32.3	3.4	310	7	5	1	0
9787	66.5	3.0	267	6	4	1	0
9788	74.9	2.7	249	6	4	1	0
9789	36.8	2.7	244	6	3	1	1
9790	23.3	2.7	249	5	3	1	0
9791	16.4	3.6	332	6	5	1	0
9792	92.8	4.1	373	7	6	1	1
9793	76.5	3.1	289	4	3	1	0
9794	76.5	3.0	274	5	4	1	1
9795	49.7	3.0	271	5	4	1	1
9796	53.9	3.0	266	5	4	1	1
9797	12.8	3.1	276	5	4	1	1
9798	87.3	3.8	348	7	5	1	0
9799	85.6	4.2	380	7	6	1	0
9800	32.2	3.9	353	7	5	1	1
9801	24.7	3.7	331	7	5	1	1
9802	18.4	2.5	218	6	5	1	0
9803	51.5	2.9	266	6	4	1	0
9804	65.2	3.1	286	6	4	1	0
9805	98.9	3.0	277	5	4	0	0
9806	45.9	2.9	259	5	4	1	0
9807	85.0	3.1	283	6	4	1	0
9808	15.0	5.2	484	7	5	1	1
9809	50.0	4.3	405	6	4	1	0
9810	38.8	4.5	423	6	5	1	0
9811	66.9	3.6	326	7	6	1	0
9812	57.9	4.7	434	8	6	1	0
9813	56.6	5.3	482	8	6	1	1
9814	50.5	4.8	437	7	6	1	1
9815	25.4	4.5	415	6	5	1	0
9816	41.8	4.3	398	5	5	1	0
9817	63.9	4.2	392	5	5	1	0
9818	40.6	4.1	380	5	5	1	1
9819	42.6	3.6	337	5	4	1	0
9820	31.8	3.7	339	6	4	1	0
9821	60.7	4.3	394	6	4	1	1
9822	34.9	3.1	278	6	5	1	0
9823	35.7	4.1	377	6	5	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9824	28.9	4.0	371	6	5	1	0
9825	30.4	3.9	363	5	4	0	0
9826	37.1	3.9	354	5	4	1	1
9827	36.4	3.8	353	6	4	1	0
9828	30.6	3.8	356	5	4	0	1
9829	30.6	3.7	339	5	4	1	1
9830	29.0	3.5	329	5	4	0	0
9831	28.9	3.3	305	4	4	1	0
9832	20.6	3.0	282	4	3	1	0
9833	24.7	2.5	221	5	3	1	1
9834	42.0	2.2	199	4	3	1	0
9835	18.6	2.5	232	4	3	0	0
9836	43.8	2.7	247	4	3	1	0
9837	25.2	2.7	246	5	3	1	0
9838	28.4	2.7	249	5	3	0	0
9839	33.8	2.7	250	5	3	0	1
9840	35.4	2.2	199	4	3	1	0
9841	19.1	2.5	232	4	3	0	0
9842	45.0	2.7	247	4	3	1	0
9843	37.6	2.7	246	5	3	1	0
9844	37.6	2.8	258	5	3	0	0
9845	23.9	2.8	255	5	3	1	0
9846	34.3	2.3	207	5	4	0	0
9847	22.3	3.2	294	5	4	1	0
9848	49.2	3.3	297	5	4	1	0
9849	18.6	3.1	284	5	4	1	0
9850	26.1	3.4	307	5	4	1	1
9851	12.9	3.3	303	5	4	1	0
9852	24.5	3.4	311	5	4	1	0
9853	32.1	3.2	291	6	4	1	1
9854	27.0	2.8	249	5	4	1	1
9855	43.9	2.2	200	4	3	1	0
9856	22.1	1.6	153	3	2	0	0
9857	43.9	1.6	150	3	2	0	0
9858	41.3	1.6	148	3	2	0	0
9859	48.5	1.6	145	3	2	1	0
9860	53.1	1.7	154	3	2	0	0
9861	53.6	1.8	169	3	2	0	0
9862	39.8	2.3	211	4	3	1	0
9863	71.1	2.5	231	4	3	0	1
9864	59.8	2.4	211	4	3	1	1
9865	45.0	3.0	274	5	4	0	0
9866	70.3	2.8	259	5	3	1	0
9867	85.5	4.3	399	7	5	1	0
9868	81.5	7.0	641	11	8	2	0
9869	13.5	10.2	946	16	11	3	0
9870	24.2	28.5	2680	26	29	8	0
9871	13.4	17.0	1596	18	17	5	0
9872	14.4	4.8	445	8	5	1	0
9873	50.0	3.1	281	6	4	1	0
9874	61.0	3.2	290	5	4	1	0
9875	46.7	4.0	364	6	5	1	0
9876	61.3	4.0	365	7	5	1	0
9877	54.1	3.6	329	6	4	1	0
9878	45.1	3.6	329	6	4	1	0
9879	48.6	3.6	332	6	4	1	0
9880	55.1	3.4	311	5	4	1	0
9881	56.3	3.4	311	5	4	1	0
9882	26.8	3.4	317	5	4	0	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9883	37.3	3.9	366	6	5	0	0
9884	46.0	3.6	331	6	4	0	1
9885	58.9	3.3	309	5	4	0	0
9886	48.7	3.4	318	5	4	1	0
9887	18.0	2.6	235	4	4	1	0
9888	31.3	3.6	329	6	4	1	0
9889	31.1	3.6	329	6	4	1	0
9890	37.6	3.6	332	6	4	1	0
9891	60.4	3.4	311	5	4	1	0
9892	39.0	3.4	311	5	4	1	0
9893	28.0	2.6	240	5	3	0	0
9894	32.9	2.8	252	4	4	1	1
9895	22.5	2.7	246	4	4	0	1
9896	29.3	2.6	240	4	3	0	1
9897	38.6	2.6	232	4	3	1	1
9898	27.7	2.5	226	4	3	1	0
9899	33.4	2.4	225	4	3	0	1
9900	32.7	2.5	224	4	3	1	1
9901	22.3	2.6	242	4	3	1	0
9902	35.8	3.2	291	5	4	1	0
9903	30.4	3.2	290	5	4	1	0
9904	38.4	3.4	310	5	4	1	0
9905	28.6	4.1	378	6	5	0	0
9906	46.1	4.0	364	6	5	1	1
9907	38.4	3.4	312	5	4	1	1
9908	27.2	2.7	244	5	4	1	0
9909	16.1	2.2	208	4	2	1	0
9910	27.4	1.2	113	2	2	0	0
9911	25.3	2.3	216	3	3	1	0
9912	45.7	2.4	224	4	3	1	1
9913	29.2	2.4	218	4	3	1	1
9914	21.6	2.4	221	4	3	0	0
9915	25.0	2.4	222	4	3	0	0
9916	22.0	2.5	225	4	3	1	0
9917	33.4	2.4	221	4	3	1	0
9918	22.5	2.3	208	4	3	1	0
9919	42.4	1.5	132	4	3	1	0
9920	23.9	2.2	198	4	3	1	1
9921	53.6	2.2	200	4	3	1	1
9922	20.2	2.3	212	4	3	1	0
9923	26.4	2.3	206	4	3	1	1
9924	23.1	2.2	203	4	3	1	1
9925	39.4	2.2	202	4	3	1	0
9926	46.6	2.1	200	3	3	0	0
9927	28.1	2.0	173	4	3	1	1
9928	24.8	2.4	219	4	3	0	0
9929	58.5	2.6	236	4	4	0	1
9930	29.0	3.6	335	6	5	1	0
9931	24.8	4.2	381	7	6	1	0
9932	30.0	3.0	280	5	5	1	0
9933	25.0	2.2	201	4	3	0	0
9934	24.5	2.1	192	4	3	1	0
9935	28.3	2.1	186	4	3	1	0
9936	20.1	2.0	182	4	3	0	0
9937	23.7	2.0	178	4	3	0	0
9938	29.6	2.0	186	4	3	0	0
9939	21.0	2.2	197	4	3	1	1
9940	29.9	2.0	180	4	3	1	1
9941	30.7	1.7	149	5	3	0	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
9942	25.0	2.3	209	4	3	1	1
9943	28.9	2.4	214	4	3	1	0
9944	36.3	2.3	213	4	3	1	0
9945	44.5	2.4	212	5	3	1	0
9946	31.6	2.3	209	4	3	1	1
9947	33.8	2.3	209	4	3	1	0
9948	34.7	2.3	208	4	4	1	0
9949	32.2	2.3	212	4	3	1	0
9950	29.2	2.3	209	5	3	1	0
9951	38.8	2.1	185	4	3	1	0
9952	34.3	2.2	199	4	3	0	1
9953	32.9	2.4	216	4	3	0	0
9954	39.6	2.7	244	4	4	1	0
9955	37.4	2.7	245	4	4	1	0
9956	37.0	2.6	236	4	3	0	0
9957	35.7	2.5	232	4	3	0	0
9958	35.7	2.5	230	4	3	1	1
9959	26.7	2.5	224	4	4	0	1
9960	39.8	2.4	219	4	3	1	1
9961	37.2	2.3	214	4	3	0	0
9962	47.7	2.4	215	4	4	1	0
9963	40.9	1.6	140	4	3	1	1
9964	32.6	2.0	182	3	3	1	1
9965	32.9	2.4	220	4	3	1	0
9966	34.0	2.6	240	4	4	1	1
9967	30.1	2.6	236	4	3	1	0
9968	37.4	2.4	221	5	3	0	0
9969	31.8	2.4	215	5	3	1	0
9970	28.4	2.3	210	4	3	1	1
9971	37.2	2.3	208	4	4	1	1
9972	30.5	2.2	202	4	3	1	0
9973	48.1	2.2	200	4	3	1	0
9974	30.4	2.2	200	3	3	1	0
9975	54.6	2.2	200	3	3	1	0
9976	36.3	2.3	211	4	3	1	1
9977	39.3	2.3	206	5	3	0	1
9978	29.4	2.6	234	4	3	1	0
9979	25.8	2.6	230	4	3	1	1
9980	33.0	2.5	229	5	3	1	1
9981	29.9	2.6	231	5	4	1	1
9982	30.8	2.6	229	5	4	1	0
9983	36.2	2.6	227	6	3	1	1
9984	37.2	2.6	229	5	3	1	1
9985	31.9	2.5	232	5	3	0	0
9986	43.4	2.5	227	5	3	1	0
9987	33.1	2.4	223	5	3	0	0
9988	41.0	2.0	181	4	3	1	0
9989	31.9	1.6	138	5	3	1	0
9990	38.4	2.2	204	4	3	1	0
9991	35.3	2.3	208	5	3	1	0
9992	24.2	2.3	209	4	3	1	1
9993	24.9	2.5	229	4	4	1	1
9994	31.8	2.6	239	4	3	1	1
9995	26.4	2.4	219	4	4	1	0
9996	20.0	4.7	436	6	5	1	0
9997	30.0	4.5	420	6	4	1	1
9998	20.9	4.4	417	4	4	1	0
9999	27.4	2.9	259	5	4	0	1
10000	28.0	3.9	360	5	4	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10001	31.6	4.1	387	3	4	1	0
10002	27.1	4.0	378	5	4	1	0
10003	25.4	4.7	435	6	5	1	1
10004	36.1	4.4	416	6	4	1	0
10005	33.1	4.2	394	6	4	1	0
10006	25.3	4.2	392	5	5	1	1
10007	26.8	4.5	429	4	5	1	0
10008	24.3	3.4	314	6	5	1	0
10009	18.8	4.6	423	6	5	1	1
10010	29.7	4.8	443	6	6	2	1
10011	28.0	5.1	470	8	6	1	0
10012	18.9	5.2	484	7	6	1	0
10013	31.7	5.5	506	8	6	2	0
10014	24.0	4.7	429	8	6	2	0
10015	29.5	5.6	520	8	6	2	0
10016	29.3	5.7	521	8	6	1	1
10017	24.4	6.5	605	10	8	1	0
10018	24.4	6.5	596	9	8	3	1
10019	26.7	5.9	547	8	7	1	1
10020	33.7	5.9	551	9	7	1	0
10021	40.1	6.0	554	8	7	2	0
10022	29.8	5.9	545	9	7	1	0
10023	36.8	5.9	539	9	8	1	1
10024	24.9	6.3	584	9	7	2	0
10025	28.9	6.5	594	10	7	2	1
10026	30.1	6.4	592	10	7	2	0
10027	28.5	6.2	574	9	8	2	0
10028	25.9	6.0	547	8	7	2	1
10029	32.9	5.8	541	8	7	1	0
10030	30.4	6.7	614	10	8	2	0
10031	32.3	5.6	511	10	8	1	0
10032	27.9	6.5	600	9	7	2	0
10033	33.2	6.3	589	10	7	1	0
10034	41.1	6.5	601	9	7	2	0
10035	30.0	6.1	567	9	7	1	0
10036	37.5	5.9	548	9	7	2	0
10037	29.8	5.9	547	9	7	1	0
10038	41.0	6.0	556	9	7	1	1
10039	29.7	5.8	536	9	7	1	0
10040	40.0	5.3	481	9	7	2	0
10041	29.7	5.1	461	8	7	2	0
10042	36.0	5.4	496	8	6	1	0
10043	30.5	5.2	481	8	7	2	0
10044	39.9	5.4	497	8	7	2	0
10045	31.3	6.0	556	9	7	2	0
10046	35.0	5.8	535	8	7	1	1
10047	35.4	5.5	505	8	7	1	1
10048	36.9	5.5	507	8	7	1	0
10049	43.7	5.6	520	9	7	1	0
10050	35.5	5.8	532	8	7	2	0
10051	32.0	5.9	544	8	7	2	0
10052	45.7	5.4	495	8	7	2	0
10053	41.9	5.1	470	7	6	1	0
10054	36.6	5.6	520	8	7	2	0
10055	45.2	7.3	676	11	9	2	0
10056	31.2	7.7	717	11	9	1	0
10057	34.0	7.1	649	11	9	1	1
10058	28.7	4.7	439	7	6	1	0
10059	29.1	4.5	421	7	5	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10060	40.3	6.1	563	8	7	2	1
10061	41.7	6.6	610	10	8	2	0
10062	29.1	7.0	648	11	9	2	1
10063	31.5	8.9	819	13	11	2	0
10064	34.2	4.1	372	7	6	1	0
10065	33.8	1.5	134	4	3	1	0
10066	23.7	2.2	195	4	3	1	0
10067	25.9	4.0	362	6	6	1	0
10068	23.3	4.5	408	7	6	1	0
10069	30.2	4.3	400	7	6	1	0
10070	32.2	4.4	398	7	6	1	1
10071	41.3	1.9	176	4	3	0	0
10072	47.0	2.0	187	3	3	0	0
10073	55.6	3.8	348	6	5	1	0
10074	37.6	4.3	397	6	5	1	1
10075	28.4	4.2	389	7	6	1	0
10076	48.8	3.5	311	6	6	2	1
10077	48.5	4.3	391	6	5	1	1
10078	45.2	4.3	397	7	5	1	0
10079	45.4	4.2	387	6	5	1	1
10080	50.4	4.0	369	6	5	1	0
10081	40.2	3.9	359	6	5	1	1
10082	40.1	4.2	385	6	5	1	0
10083	43.1	4.8	446	7	6	1	0
10084	32.7	5.1	467	8	7	2	1
10085	27.6	5.3	488	8	7	1	0
10086	39.7	4.9	444	9	8	1	0
10087	34.7	7.8	709	14	11	2	1
10088	55.6	8.9	809	16	14	2	0
10089	26.0	8.4	770	15	12	2	0
10090	20.0	7.2	672	10	8	1	0
10091	25.0	6.2	569	9	7	2	1
10092	56.4	5.1	466	7	6	2	0
10093	33.9	5.1	468	7	6	1	0
10094	47.1	5.1	470	8	6	2	1
10095	30.2	5.3	487	7	6	1	0
10096	34.0	5.1	480	7	5	1	0
10097	40.7	4.6	424	7	6	1	0
10098	20.3	4.8	443	6	5	1	1
10099	25.7	4.6	429	6	5	1	1
10100	34.0	4.4	401	6	6	2	0
10101	22.3	4.3	395	6	5	1	0
10102	24.0	4.5	420	6	5	1	0
10103	24.4	4.8	452	6	5	1	0
10104	26.7	4.5	424	6	5	1	0
10105	25.4	4.3	397	6	5	1	0
10106	29.9	6.3	586	9	7	2	0
10107	28.7	6.5	608	9	7	2	0
10108	25.8	4.5	415	6	5	1	0
10109	24.1	4.2	394	6	5	1	0
10110	27.1	4.3	393	6	6	1	1
10111	26.1	4.0	372	6	4	1	0
10112	25.2	3.9	354	7	5	1	1
10113	32.4	4.2	386	6	5	1	1
10114	27.5	4.7	432	7	6	1	1
10115	27.4	4.4	406	7	5	1	0
10116	27.0	4.1	376	6	5	1	0
10117	21.1	4.2	385	6	5	1	0
10118	25.1	4.2	389	6	5	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10119	28.6	3.9	358	6	5	1	0
10120	33.0	4.1	373	7	5	1	0
10121	48.7	4.1	378	7	5	1	0
10122	29.8	4.2	389	7	6	1	0
10123	43.9	4.2	381	8	5	1	1
10124	34.2	4.2	385	6	5	1	0
10125	42.6	4.9	448	7	6	1	0
10126	27.5	5.3	481	8	7	2	1
10127	35.9	5.0	456	8	7	2	0
10128	22.4	4.6	419	8	6	2	0
10129	32.9	4.3	389	6	6	1	1
10130	32.4	4.3	393	7	6	1	1
10131	36.6	4.5	412	8	6	1	0
10132	26.8	4.3	395	7	6	1	0
10133	32.7	4.1	376	6	5	1	0
10134	36.9	4.0	370	6	5	1	0
10135	21.4	3.9	357	6	5	1	0
10136	31.5	4.0	366	6	6	1	0
10137	24.3	4.8	443	8	6	1	0
10138	33.8	4.4	402	7	6	1	0
10139	28.3	4.1	377	7	5	1	0
10140	28.5	4.2	385	6	5	1	0
10141	28.2	4.4	399	7	6	1	0
10142	40.7	4.6	421	7	6	1	0
10143	36.2	4.6	423	7	6	1	1
10144	22.7	4.6	419	7	6	1	1
10145	32.1	4.5	415	7	6	1	0
10146	48.3	4.4	407	7	6	1	0
10147	33.4	4.5	416	7	6	1	0
10148	39.1	4.8	442	7	6	1	0
10149	26.4	4.9	456	8	6	1	0
10150	37.1	4.8	446	8	6	1	0
10151	41.3	4.5	409	7	6	1	1
10152	36.2	4.1	375	6	5	1	1
10153	18.1	3.8	352	6	5	0	1
10154	22.6	4.3	396	6	5	1	1
10155	21.8	6.1	563	9	7	2	0
10156	28.2	6.7	616	10	8	2	0
10157	29.7	4.8	442	7	6	1	0
10158	28.2	4.2	386	7	5	0	1
10159	23.6	4.2	382	7	5	1	1
10160	28.5	4.1	375	7	5	1	0
10161	34.0	4.1	376	6	5	1	1
10162	28.8	6.3	582	10	8	1	0
10163	30.3	5.2	476	8	7	1	0
10164	34.3	4.1	383	6	5	1	0
10165	34.8	3.8	346	6	5	1	1
10166	30.8	3.4	302	7	5	1	0
10167	35.3	3.3	294	6	5	1	0
10168	21.3	5.8	534	9	7	2	0
10169	29.2	3.0	273	5	4	0	0
10170	45.9	4.2	385	6	5	1	0
10171	36.4	4.4	399	7	6	1	0
10172	41.9	4.6	421	7	6	1	0
10173	25.0	4.6	423	7	6	1	1
10174	29.3	4.6	419	7	6	1	1
10175	31.6	4.5	415	7	6	1	0
10176	24.9	4.4	407	7	6	1	0
10177	30.3	3.8	344	6	5	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10178	37.3	2.8	259	5	4	1	1
10179	21.5	3.2	293	5	4	0	1
10180	24.8	3.6	329	6	5	1	0
10181	25.7	5.4	492	9	7	1	0
10182	39.9	9.1	841	14	11	1	0
10183	30.2	10.0	917	16	12	3	0
10184	25.0	6.2	569	9	8	2	1
10185	25.0	3.9	365	5	4	0	0
10186	24.2	3.8	351	7	4	1	1
10187	19.5	4.7	433	9	5	1	1
10188	45.1	5.2	478	9	6	1	0
10189	28.5	4.3	400	7	6	0	0
10190	30.7	4.3	401	6	5	1	0
10191	24.1	4.6	421	7	5	1	0
10192	25.7	4.4	403	6	5	1	1
10193	21.7	4.5	412	6	6	1	1
10194	18.1	3.9	364	5	5	1	1
10195	31.3	5.0	463	7	6	1	1
10196	26.4	4.5	419	6	6	1	1
10197	28.2	4.0	367	6	5	1	0
10198	31.1	4.3	404	6	5	1	0
10199	25.1	4.4	410	6	5	1	1
10200	29.8	4.4	407	7	5	1	0
10201	31.1	4.5	413	7	6	1	1
10202	18.2	4.3	401	6	5	0	1
10203	33.9	4.1	383	6	5	1	0
10204	33.4	3.9	361	6	5	1	0
10205	23.6	3.8	348	7	5	1	0
10206	25.4	4.6	429	7	6	1	0
10207	26.3	5.2	483	9	6	1	1
10208	31.8	4.8	436	7	6	1	1
10209	26.0	4.7	426	8	6	2	0
10210	29.3	4.7	431	7	6	1	1
10211	33.7	4.3	394	8	6	0	0
10212	30.8	4.7	429	8	6	1	0
10213	31.9	4.7	430	9	6	1	0
10214	32.6	4.8	435	9	6	1	0
10215	12.0	5.2	470	9	7	1	1
10216	35.1	5.5	501	9	7	2	1
10217	23.2	4.9	449	10	6	2	0
10218	30.7	5.1	461	9	7	1	1
10219	25.3	5.0	454	9	6	1	0
10220	30.4	4.9	451	8	6	1	0
10221	31.0	5.0	456	8	7	2	0
10222	47.8	4.8	443	8	6	1	0
10223	36.1	4.7	436	7	6	0	0
10224	40.9	4.8	440	7	6	1	1
10225	34.9	4.6	419	7	6	1	0
10226	30.0	4.3	394	7	6	1	0
10227	32.1	5.7	522	9	7	1	0
10228	22.1	5.8	531	8	7	1	1
10229	31.6	5.0	459	7	6	1	1
10230	27.3	5.1	470	8	6	1	1
10231	27.4	5.6	515	8	7	1	1
10232	29.8	5.4	496	8	7	1	0
10233	29.3	5.1	468	8	6	2	1
10234	37.7	4.9	453	8	5	1	0
10235	38.4	4.8	440	7	6	1	1
10236	38.8	4.6	431	7	5	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10237	33.0	4.6	423	7	5	1	1
10238	38.3	4.5	418	7	5	1	1
10239	41.8	4.5	413	7	5	1	0
10240	37.4	4.4	405	8	5	1	1
10241	30.6	4.5	413	7	5	1	1
10242	39.4	5.0	465	8	6	1	0
10243	27.8	5.3	490	10	6	2	0
10244	41.0	5.7	520	9	6	2	1
10245	31.2	5.5	508	8	6	1	1
10246	37.3	5.4	498	8	6	1	1
10247	28.8	5.4	493	8	6	1	1
10248	43.0	5.4	498	10	7	1	1
10249	28.7	6.2	568	10	7	1	1
10250	32.6	6.5	599	10	7	1	1
10251	26.0	6.6	611	12	7	1	0
10252	25.3	5.0	459	10	6	1	1
10253	33.1	4.6	421	7	5	1	1
10254	33.1	4.3	395	8	5	1	1
10255	28.9	3.8	345	7	4	1	0
10256	31.5	5.3	489	8	6	1	0
10257	46.9	6.0	559	9	7	1	0
10258	34.7	4.9	455	9	5	1	1
10259	40.0	4.3	389	8	5	1	1
10260	39.4	4.1	381	7	5	1	0
10261	32.2	4.2	385	8	5	1	1
10262	40.7	4.9	449	8	6	1	1
10263	30.2	5.5	500	9	7	1	1
10264	34.8	4.7	429	8	6	1	1
10265	38.6	3.6	331	6	4	1	1
10266	47.6	3.8	345	6	4	1	1
10267	45.1	3.8	344	6	4	1	1
10268	38.9	3.6	326	6	4	1	1
10269	34.2	3.4	312	5	4	1	1
10270	38.8	2.8	255	4	4	1	1
10271	43.9	2.6	237	4	3	1	1
10272	30.2	3.2	291	5	3	1	1
10273	35.8	3.4	308	5	4	1	1
10274	37.6	3.3	306	6	4	1	0
10275	40.3	3.9	356	6	5	1	0
10276	39.7	4.0	364	7	5	1	0
10277	20.8	3.9	355	6	4	1	1
10278	18.0	3.8	342	6	5	2	1
10279	6.6	3.0	264	6	4	1	0
10280	4.4	1.5	136	3	3	1	0
10281	3.6	1.4	123	3	2	1	0
10282	32.6	2.8	251	6	4	2	1
10283	31.0	3.0	263	6	4	1	1
10284	39.6	2.8	254	5	5	1	1
10285	40.4	2.9	262	5	4	1	1
10286	25.7	2.8	252	5	4	1	1
10287	12.6	3.3	285	7	5	2	1
10288	1.1	3.8	330	8	7	3	0
10289	2.0	4.6	404	9	8	3	1
10290	1.0	5.4	480	9	8	3	1
10291	1.0	5.3	475	10	8	3	0
10292	1.0	5.3	470	10	8	3	0
10293	2.6	4.9	437	8	8	3	1
10294	3.2	5.4	483	10	9	3	0
10295	2.4	5.5	483	12	9	3	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10296	1.7	3.4	296	7	6	2	1
10297	2.0	3.6	323	7	6	1	0
10298	1.7	3.7	334	7	6	1	0
10299	5.9	3.5	318	7	5	2	0
10300	5.6	3.4	310	7	5	2	0
10301	5.6	3.4	310	7	5	2	0
10302	2.6	8.7	790	12	11	4	1
10303	2.5	8.7	790	12	11	4	1
10304	2.5	5.6	504	9	8	3	0
10305	2.4	5.6	504	9	8	3	0
10306	2.6	2.2	178	7	6	3	0
10307	2.5	2.0	162	6	5	3	0
10308	3.0	1.7	134	5	4	2	1
10309	2.1	1.5	128	5	4	1	0
10310	3.4	1.2	97	4	3	1	1
10311	5.4	1.4	115	4	3	2	0
10312	8.9	1.8	152	5	4	2	0
10313	5.9	1.2	100	4	2	1	0
10314	3.5	1.3	108	4	2	1	0
10315	4.9	1.4	118	4	3	2	0
10316	4.2	1.3	101	3	2	2	1
10317	3.9	1.3	102	4	3	1	1
10318	4.9	1.3	102	4	3	1	1
10319	5.1	2.6	229	5	4	2	0
10320	1.1	1.9	160	4	3	2	0
10321	2.4	1.8	151	4	3	2	1
10322	7.2	2.1	181	4	3	2	1
10323	2.4	2.3	197	6	4	1	0
10324	2.9	2.1	184	5	4	1	0
10325	2.2	2.5	217	5	4	1	1
10326	5.0	1.8	156	4	3	1	0
10327	8.6	2.0	179	5	3	1	0
10328	8.9	1.5	132	3	2	1	1
10329	4.8	2.0	175	4	3	0	1
10330	10.0	2.1	190	5	3	1	0
10331	11.3	2.0	186	4	3	0	0
UPPER BASAL SALINA							
10332	11.4	1.9	176	4	2	0	0
10333	23.1	3.2	287	6	4	1	1
10334	16.1	2.6	233	5	3	1	1
10335	23.4	2.7	242	5	4	1	1
10336	14.0	3.2	290	6	5	1	0
10337	17.0	4.3	392	7	5	1	0
10338	10.3	12.2	1102	23	16	4	1
10339	13.4	11.9	1071	24	15	4	1
10340	16.9	6.5	594	13	8	2	0
10341	21.1	4.9	449	9	7	2	0
10342	18.6	5.5	501	11	7	1	0
10343	26.5	6.7	611	13	8	2	0
10344	24.6	7.7	705	15	9	2	1
10345	26.7	9.1	832	16	10	3	1
10346	17.6	10.8	984	20	13	3	1
10347	24.1	9.8	889	19	13	3	1
10348	21.6	6.5	584	14	9	2	0
10349	17.3	4.9	449	11	7	1	0
10350	12.6	3.6	325	8	5	1	0
10351	8.5	3.7	333	7	5	1	1
10352	18.5	3.4	312	7	4	1	0
10353	19.7	3.0	274	6	4	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10354	13.0	3.3	293	7	4	1	0
10355	12.7	4.7	420	10	7	1	0
10356	11.5	4.6	412	10	7	1	1
10357	11.4	4.0	354	9	6	1	1
10358	12.4	3.3	299	8	5	1	0
10359	15.1	3.4	303	8	5	1	0
10360	11.9	2.7	238	6	4	1	0
10361	13.6	2.8	253	6	4	1	0
10362	5.2	4.8	427	10	6	1	1
10363	16.0	5.1	463	12	7	2	0
10364	20.2	5.4	487	12	8	1	1
10365	15.2	5.5	486	13	8	2	0
10366	16.0	5.4	474	14	9	2	1
10367	17.2	4.8	418	14	7	2	0
10368	13.2	3.4	305	9	5	2	0
10369	10.7	2.3	199	6	4	1	1
10370	10.5	2.9	255	8	5	1	0
10371	6.8	3.1	264	7	6	2	1
10372	7.3	2.8	243	7	5	1	1
10373	4.8	2.5	222	6	4	1	1
10374	12.0	3.5	309	10	7	1	0
10375	1.7	2.9	256	8	5	1	1
10376	6.1	2.6	235	6	5	1	0
10377	7.2	2.6	225	6	5	2	1
10378	3.4	2.7	230	7	4	1	1
10379	4.6	2.4	212	6	4	1	0
10380	4.3	2.4	210	6	4	1	1
10381	6.2	2.5	215	6	5	1	1
10382	4.2	2.5	220	6	5	1	1
10383	9.7	2.4	211	6	4	2	0
10384	5.7	2.2	193	5	3	1	0
10385	6.1	2.3	202	5	4	0	1
10386	3.6	2.3	208	5	4	1	0
10387	5.2	4.1	369	9	6	1	0
10388	0.6	3.9	343	10	6	1	1
10389	9.2	3.0	258	8	6	1	1
10390	5.0	2.8	237	8	5	1	1
10391	4.2	2.2	187	6	5	1	1
10392	5.3	1.7	143	6	4	1	1
10393	3.3	1.3	116	3	1	0	1
10394	4.2	1.6	141	4	3	1	0
10395	2.7	1.4	119	3	2	1	1
10396	3.6	1.9	164	5	3	1	0
10397	5.1	2.0	172	5	3	1	1
10398	5.6	1.5	133	4	3	0	1
10399	4.8	1.7	151	4	3	0	0
10400	5.4	2.0	182	5	3	1	1
10401	4.7	1.6	133	3	3	1	1
10402	7.1	2.0	175	5	3	1	0
10403	4.8	15.1	1304	42	28	8	1
10404	10.1	11.0	940	32	23	7	1
10405	12.8	7.2	621	20	15	5	0
10406	12.6	4.5	397	11	8	3	0
10407	12.4	3.3	285	8	6	1	1
10408	10.9	3.0	268	7	5	1	0
10409	7.7	3.3	291	8	5	1	1
10410	5.9	2.4	208	6	4	1	0
10411	7.1	2.3	197	7	5	1	1
10412	4.6	2.1	176	6	4	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10413	6.9	1.7	148	5	3	1	1
10414	5.2	1.6	133	4	3	1	1
10415	4.5	1.6	133	4	3	1	0
10416	4.6	1.9	165	6	4	0	0
10417	10.0	2.2	183	7	5	1	1
10418	7.3	1.8	156	5	4	1	1
10419	7.0	1.5	127	5	3	0	0
10420	10.0	1.4	122	4	3	1	1
10421	6.6	1.9	163	5	4	1	1
10422	7.7	2.4	205	6	5	1	1
10423	11.2	2.1	185	6	4	1	0
10424	12.7	2.0	166	7	4	1	0
10425	5.8	1.4	123	4	3	0	0
10426	5.3	1.2	102	4	2	1	1
10427	6.5	1.4	117	5	2	1	1
10428	9.0	0.8	67	3	1	0	1
10429	7.7	1.6	138	4	3	1	0
10430	12.6	1.6	131	6	3	1	0
10431	17.0	2.4	207	7	4	1	0
10432	10.5	2.0	173	6	3	1	1
10433	6.1	2.3	198	8	4	0	0
10434	6.2	2.5	220	7	5	0	0
10435	6.5	2.2	187	7	4	1	1
10436	7.0	1.8	156	5	3	1	1
10437	5.9	1.6	139	5	3	1	1
10438	9.6	2.0	169	6	4	1	2
10439	6.6	1.9	163	5	4	1	0
10440	5.6	1.9	168	5	4	1	0
10441	6.7	1.8	154	5	3	1	1
10442	8.7	2.2	192	6	4	1	1
10443	5.0	2.0	166	5	4	1	1
10444	1.6	1.8	160	4	3	1	0
10445	6.3	1.5	133	5	3	0	1
10446	6.1	2.1	174	5	4	2	1
10447	4.9	2.0	173	6	3	1	0
10448	4.3	2.1	176	7	4	2	0
10449	7.9	6.5	597	12	7	1	0
10450	7.1	4.8	438	9	6	2	1
10451	9.0	3.6	325	8	5	2	0
10452	7.9	2.9	259	6	4	1	1
10453	7.7	3.8	340	8	5	1	1
10454	7.2	3.4	305	8	5	1	0
10455	5.3	1.6	135	5	3	1	0
10456	5.2	1.6	141	4	3	1	0
10457	10.2	2.6	229	6	4	1	0
10458	10.8	2.4	213	6	4	1	0
10459	4.8	3.0	260	7	4	1	1
10460	8.4	2.8	242	8	5	1	0
10461	13.6	2.4	204	8	5	1	0
10462	7.4	2.8	240	9	6	1	0
10463	1.9	1.1	97	3	2	1	0
10464	6.5	2.2	188	6	4	1	0
10465	9.0	2.2	188	5	4	1	1
10466	9.7	2.0	171	6	4	1	0
10467	6.0	2.1	179	6	4	1	0
10468	9.1	1.8	148	6	3	1	1
10469	2.0	2.0	181	5	3	1	0
10470	8.0	2.3	196	6	4	1	1
10471	6.4	1.9	163	5	3	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10472	6.6	2.0	174	6	4	0	1
10473	4.1	2.0	166	6	4	1	1
10474	8.6	1.9	166	5	4	1	1
10475	12.5	2.0	169	6	3	1	1
10476	10.4	2.0	176	6	3	0	1
10477	8.9	1.2	107	5	2	0	0
10478	1.4	2.0	176	6	3	0	1
10479	6.3	1.2	107	5	2	0	0
10480	10.2	1.2	107	5	2	0	0
10481	2.4	1.7	152	5	3	0	1
10482	5.3	1.6	145	4	3	1	0
10483	4.6	1.7	150	5	3	0	1
10484	4.8	1.9	173	6	3	0	0
10485	6.6	1.0	91	3	2	0	0
10486	5.1	1.5	132	4	2	0	0
10487	6.1	1.5	134	4	3	0	1
10488	7.6	2.5	227	6	3	1	0
10489	6.0	2.2	196	5	3	1	1
10490	7.0	2.0	180	6	3	0	0
10491	6.3	1.9	166	6	4	0	1
10492	4.9	2.0	184	5	4	0	0
10493	4.1	1.2	107	3	2	1	1
10494	4.3	1.6	138	5	3	0	0
10495	5.2	1.5	135	4	2	1	0
10496	3.9	1.7	155	4	2	1	0
10497	4.8	1.9	170	5	3	0	1
10498	5.1	1.7	147	6	3	0	0
10499	5.5	1.6	143	4	3	0	0
10500	4.1	1.6	135	4	2	1	1
10501	4.7	1.4	115	4	2	1	1
10502	5.3	0.4	32	2	1	0	0
10503	4.3	1.3	115	4	2	0	0
10504	7.3	1.3	112	3	2	0	1
10505	6.5	1.4	126	4	2	1	1
10506	5.2	1.6	140	5	3	1	0
10507	4.6	1.5	133	5	2	0	0
10508	5.0	1.7	147	4	3	1	1
10509	3.9	1.6	141	4	2	1	0
10510	5.6	1.4	129	4	2	0	0
10511	4.9	1.5	133	4	2	1	0
10512	5.4	0.7	61	2	1	0	1
10513	4.8	1.6	141	4	3	0	0
10514	5.4	1.6	140	4	2	0	0
10515	4.5	1.3	118	5	2	0	0
10516	7.4	1.4	130	4	2	0	0
10517	4.5	1.6	138	4	2	1	0
10518	5.2	1.6	140	3	3	1	0
10519	6.5	2.9	266	6	3	0	0
10520	4.3	2.8	255	5	3	1	0
10521	6.7	2.5	229	5	3	0	0
10522	11.0	2.0	176	4	2	1	0
10523	6.2	1.9	173	4	2	1	1
10524	1.8	2.1	193	4	3	1	0
10525	7.5	2.2	199	4	3	1	0
10526	6.2	1.8	155	4	3	1	0
10527	5.2	1.8	158	5	3	0	1
10528	5.3	1.6	139	4	3	0	0
10529	7.6	1.4	116	5	3	1	1
10530	6.5	1.5	131	4	3	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10531	6.3	1.6	145	4	3	0	1
10532	4.5	1.7	142	4	3	1	1
10533	6.7	1.7	141	5	3	1	1
10534	5.7	1.6	140	5	3	1	1
10535	6.1	1.6	136	5	3	1	0
10536	7.0	1.4	119	4	3	0	0
10537	6.5	1.5	134	4	3	1	0
10538	5.9	2.2	193	4	3	1	0
10539	6.8	3.6	330	6	4	1	0
10540	6.4	4.3	398	7	5	1	0
10541	6.2	5.0	464	8	5	1	1
10542	6.2	5.0	464	8	5	1	1
10543	6.2	5.0	464	8	5	1	1
10544	3.1	6.0	559	9	6	2	1
10545	8.4	2.8	248	7	4	1	1
10546	14.5	2.0	178	5	3	1	0
10547	9.6	2.0	174	5	3	1	1
10548	5.6	1.6	138	5	3	0	0
10549	5.8	1.6	137	4	3	0	1
10550	6.6	1.3	110	3	2	1	1
10551	4.8	1.7	149	4	3	0	0
10552	5.2	1.7	149	4	3	0	0
10553	8.0	1.7	141	4	3	1	1
10554	4.8	1.7	144	4	3	0	1
10555	5.8	1.8	152	4	3	1	1
10556	6.4	1.8	152	4	2	1	1
10557	5.9	1.7	150	4	2	1	1
10558	6.3	2.0	165	6	3	1	1
10559	4.1	2.3	203	5	3	1	0
10560	6.0	1.7	149	6	3	0	0
10561	7.0	1.9	171	4	3	1	0
10562	5.8	1.9	165	4	3	1	0
10563	5.7	1.6	135	4	3	0	1
10564	10.7	1.3	112	4	3	0	0
10565	8.8	1.7	143	5	3	1	0
10566	7.0	2.6	231	6	3	1	1
10567	5.7	2.2	199	6	3	0	0
10568	7.2	2.0	178	5	3	0	0
10569	10.0	3.2	289	8	5	1	0
10570	7.1	3.0	264	7	5	1	0
10571	8.9	3.2	278	8	6	1	0
10572	4.1	2.2	199	6	3	0	0
10573	6.1	2.0	178	5	3	0	0
10574	10.9	2.0	178	5	3	0	0
10575	8.3	35.5	3123	95	55	19	0
10576	13.0	36.4	3191	89	55	19	5
10577	8.7	35.9	3162	88	55	18	2
10578	13.5	30.0	2619	81	48	17	2
10579	7.4	20.7	1814	49	33	12	3
10580	7.2	23.2	2013	53	40	14	4
10581	7.9	21.7	1896	51	37	13	1
10582	10.7	20.1	1757	46	34	12	3
10583	7.3	20.3	1777	46	33	11	4
10584	11.0	20.3	1777	46	33	11	4
10585	10.6	17.9	1548	49	30	11	1
10586	12.1	17.3	1482	47	28	10	5
10587	16.6	14.7	1261	41	26	10	2
10588	16.3	15.9	1378	45	27	10	1
10589	16.0	15.3	1307	41	28	12	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10590	20.4	14.0	1178	34	28	12	4
10591	11.0	13.2	1124	33	27	11	1
10592	16.3	12.0	1016	30	25	11	0
10593	17.6	13.1	1097	33	28	11	3
10594	19.4	13.5	1128	34	29	12	4
10595	15.5	11.7	976	30	27	11	1
10596	14.6	11.1	910	28	25	11	4
10597	10.5	10.1	841	27	24	10	0
10598	13.9	10.2	841	30	23	10	1
10599	15.3	10.8	880	32	24	11	3
10600	11.2	9.8	802	29	24	11	1
10601	10.0	10.1	821	27	23	11	4
10602	12.0	9.2	757	25	21	10	1
10603	10.0	9.0	743	26	22	10	0
10604	12.0	8.8	727	25	22	10	0
10605	9.0	8.7	711	25	21	11	0
10606	12.5	8.8	727	25	22	10	0
10607	12.2	8.7	711	25	21	11	0
10608	15.6	8.7	711	25	21	11	0
10609	14.1	8.4	700	23	19	9	0
10610	21.8	7.2	600	20	15	7	1
10611	16.6	5.4	450	18	11	5	1
10612	19.6	4.2	350	13	9	4	1
10613	14.4	3.5	300	10	7	2	0
10614	16.5	2.9	250	9	6	2	0
10615	17.0	3.0	258	6	4	3	1
10616	14.3	2.9	253	6	5	2	1
10617	17.9	2.9	254	7	5	2	0
10618	22.5	3.5	310	8	5	2	0
10619	17.4	3.4	300	8	5	2	0
10620	19.7	2.7	235	6	4	2	0
10621	20.9	3.3	293	6	4	2	0
10622	18.1	3.6	325	8	5	2	0
10623	21.4	3.2	284	7	5	2	0
10624	19.0	3.2	284	7	5	2	0
10625	9.0	3.4	309	6	5	2	0
10626	12.0	4.1	369	7	5	3	0
10627	14.8	4.3	388	8	6	3	0
10628	17.7	3.4	309	6	5	2	0
10629	18.8	4.1	369	7	5	3	0
10630	13.6	4.3	388	8	6	3	0
10631	16.6	3.0	258	6	4	3	1
10632	15.3	2.9	253	6	5	2	1
10633	11.3	2.9	254	7	5	2	0
10634	11.3	2.5	211	7	6	2	0
10635	8.9	2.6	217	7	6	2	1
10636	12.1	2.2	178	6	5	3	0
10637	11.8	2.2	180	6	5	2	0
10638	11.3	2.1	180	5	4	2	0
10639	12.2	1.7	145	5	3	1	0
10640	12.2	1.9	168	5	4	1	0
10641	7.7	1.9	168	4	3	1	1
10642	7.7	2.0	168	5	3	1	1
10643	7.7	2.0	168	5	3	1	1
10644	9.3	2.2	185	5	4	2	1
10645	12.2	2.3	197	6	4	2	0
10646	11.2	3.0	258	6	4	3	1
10647	12.8	2.9	253	6	5	2	1
10648	9.1	2.9	254	6	5	2	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10649	6.1	2.4	211	7	5	1	0
10650	12.7	2.6	217	7	5	2	1
10651	12.8	2.6	223	6	5	2	1
10652	12.2	2.7	231	6	4	2	1
10653	15.1	2.3	201	7	3	2	0
10654	12.2	3.5	310	8	5	1	0
10655	11.3	3.4	300	8	5	2	0
10656	14.0	2.7	235	6	4	2	0
10657	12.0	3.3	293	6	4	2	0
10658	12.0	3.6	325	8	5	2	0
10659	14.4	3.2	284	7	5	2	0
10660	9.7	3.2	284	7	5	2	0
10661	11.3	3.4	309	6	5	2	0
10662	11.7	4.1	369	7	5	3	0
10663	9.2	4.3	388	8	6	3	0
10664	11.1	4.5	405	8	6	1	1
10665	12.3	4.3	386	7	5	3	0
10666	13.3	3.9	348	6	5	2	1
10667	18.0	3.5	321	6	5	1	0
10668	16.7	5.0	438	11	8	3	0
10669	19.2	2.7	242	6	3	1	1
10670	20.0	1.6	143	4	2	0	0
10671	15.9	3.1	270	7	5	2	0
10672	6.5	3.9	346	8	5	3	1
10673	9.1	5.9	537	10	6	3	0
10674	11.0	5.8	521	9	7	3	1
10675	11.0	5.5	504	9	7	1	0
10676	10.3	5.8	523	11	7	3	0
10677	10.9	8.2	743	12	9	4	1
10678	9.6	8.9	819	13	10	3	1
10679	8.2	3.3	300	5	4	2	0
10680	11.1	6.3	563	12	7	3	1
10681	11.9	9.3	851	14	10	4	0
10682	9.6	7.7	681	17	11	4	1
10683	15.8	12.9	1169	22	15	6	1
10684	17.5	12.0	1091	21	14	5	0
10685	17.1	11.2	1015	20	13	5	1
10686	18.2	10.7	971	19	12	5	1
10687	17.2	11.1	999	19	13	5	2
10688	16.7	11.7	1066	20	14	6	0
10689	18.8	13.7	1247	23	15	6	1
10690	16.2	26.4	2421	44	29	10	1
10691	17.9	46.9	4239	86	58	20	5
10692	17.2	22.8	2034	47	35	12	0
10693	13.3	17.5	1544	37	28	11	0
10694	16.8	14.8	1312	30	23	9	1
10695	18.0	12.3	1096	25	18	7	1
10696	17.8	10.7	950	22	16	6	0
10697	11.1	10.3	917	21	15	6	1
10698	22.4	10.2	904	20	14	6	1
10699	17.2	9.5	851	18	13	5	0
10700	15.5	9.2	815	18	13	5	1
10701	17.4	9.1	814	18	13	5	1
10702	16.2	8.7	770	17	12	5	1
10703	12.7	8.9	785	21	12	5	1
10704	18.7	8.2	726	17	12	5	0
10705	16.6	7.8	695	16	12	4	0
10706	15.5	7.5	670	14	11	4	1
10707	21.9	7.8	695	15	11	4	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10708	25.0	2.4	215	5	3	1	0
10709	23.5	5.6	493	11	9	4	0
10710	22.4	5.6	485	11	9	4	1
10711	19.7	5.2	476	9	7	2	0
10712	20.0	7.1	631	13	11	5	0
10713	17.0	5.6	493	11	9	4	0
10714	17.1	5.6	485	11	9	4	1
10715	19.2	5.9	519	12	10	4	0
10716	16.7	5.9	525	12	10	4	0
10717	19.1	3.0	269	6	5	2	0
10718	17.8	3.5	311	6	5	3	0
10719	18.9	3.6	323	6	5	1	1
10720	7.9	2.8	253	5	3	2	1
10721	9.7	1.9	169	4	3	1	1
10722	18.3	1.6	148	3	2	1	0
10723	3.3	1.4	127	3	2	1	0
10724	3.6	1.2	111	2	2	1	0
10725	4.4	1.4	125	3	1	1	0
10726	3.1	1.2	104	3	2	1	1
10727	3.5	1.4	120	3	2	1	0
10728	3.2	1.3	114	3	2	0	0
10729	3.1	1.2	105	3	1	1	1
10730	2.9	1.2	104	3	1	1	1
10731	2.7	1.1	94	2	1	1	0
10732	2.5	0.9	80	2	1	1	1
10733	3.5	1.3	121	2	2	1	0
10734	4.8	1.3	116	2	2	1	1
10735	4.1	0.8	73	2	1	0	0
10736	8.3	1.0	86	2	1	1	0
10737	9.9	1.4	128	3	1	1	1
10738	9.0	1.5	137	3	1	1	1
10739	9.0	1.4	131	3	0	0	0
10740	10.9	1.2	112	3	1	0	0
10741	11.8	1.3	121	3	1	1	0
10742	13.0	1.5	142	3	2	0	0
10743	8.5	1.9	178	3	2	0	1
10744	7.7	2.1	188	3	3	1	0
10745	7.5	2.3	207	4	2	1	1
10746	8.7	2.3	206	5	2	0	1
10747	11.3	2.1	188	4	2	1	0
10748	9.1	2.4	222	4	2	1	0
10749	10.5	2.1	195	5	2	0	0
10750	10.0	2.1	187	5	2	1	1
10751	11.0	1.8	164	4	2	0	0
10752	10.2	1.9	174	4	2	1	0
10753	13.3	2.0	177	4	2	0	1
10754	9.5	2.0	180	5	2	0	0
10755	10.5	1.7	150	4	2	1	0
10756	8.7	2.8	259	5	3	1	0
10757	9.8	2.0	189	4	2	0	0
10758	10.4	1.8	161	4	2	1	0
10759	14.1	1.8	152	4	2	1	1
10760	13.5	1.7	158	4	2	0	0
10761	14.4	1.5	134	3	2	1	0
10762	12.5	1.5	132	3	2	0	1
10763	11.2	1.3	110	4	1	1	0
10764	12.8	1.5	126	4	2	1	1
10765	15.3	1.3	113	3	2	0	0
10766	13.5	1.2	100	4	2	1	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10767	13.9	1.1	102	3	2	0	0
10768	15.7	1.1	96	3	1	0	1
10769	13.3	1.1	89	3	1	1	1
10770	15.5	0.9	72	3	2	1	0
10771	15.5	1.2	101	4	1	0	1
10772	19.6	1.2	101	4	1	0	1
10773	18.8	1.5	125	3	2	1	1
10774	19.1	1.7	158	4	2	0	0
10775	14.0	1.5	137	3	2	1	0
10776	18.9	1.6	141	4	2	0	1
10777	18.4	1.2	110	4	2	0	0
10778	22.6	1.3	110	3	2	1	1
10779	17.8	1.3	117	3	2	0	1
10780	22.4	1.3	112	3	1	1	1
10781	18.3	1.5	135	3	2	0	1
10782	23.7	1.3	112	3	2	1	0
10783	17.0	1.4	112	4	2	1	1
10784	20.9	1.3	118	4	2	0	0
10785	15.2	1.1	97	3	2	0	0
10786	22.2	1.4	119	4	2	1	1
10787	14.7	1.3	118	4	2	0	0
10788	16.7	1.1	94	3	2	0	1
10789	15.4	1.2	110	4	2	0	0
10790	15.0	1.3	102	4	2	1	1
10791	14.0	1.0	80	3	1	1	1
10792	14.7	1.0	78	3	2	1	1
10793	15.9	1.3	105	4	2	1	1
10794	15.6	2.3	208	6	3	1	0
10795	16.1	3.4	304	7	5	1	1
10796	18.1	2.0	175	6	4	1	0
10797	23.8	2.2	190	6	4	1	0
10798	19.6	2.6	224	7	5	1	0
10799	22.6	2.9	248	8	5	1	1
10800	19.6	2.9	246	8	5	2	0
10801	16.5	2.6	224	7	5	1	0
10802	18.9	2.6	223	9	5	1	0
10803	20.1	2.6	222	7	5	1	0
10804	14.7	2.2	187	6	4	1	0
10805	18.0	2.0	174	5	3	1	0
10806	19.3	1.9	165	5	4	1	0
10807	19.1	2.1	185	5	4	1	0
10808	15.5	2.0	172	5	4	1	0
10809	12.0	2.2	187	6	4	1	1
10810	22.2	2.0	174	5	3	1	0
10811	18.4	2.0	165	5	4	1	1
10812	20.1	2.1	185	5	4	1	0
10813	24.9	2.2	190	6	5	1	0
10814	4.9	2.5	200	8	7	2	0
10815	3.7	4.3	363	14	9	4	0
10816	2.1	4.9	436	11	6	3	0
10817	6.4	9.8	886	21	13	4	0
10818	7.1	9.1	820	19	12	3	1
10819	4.7	3.2	294	7	3	1	1
10820	1.7	2.8	262	5	3	0	1
10821	5.2	3.0	272	5	4	1	0
10822	3.5	3.1	277	6	5	1	0
10823	2.7	3.6	327	8	5	2	0
10824	2.6	3.8	341	8	5	1	1
10825	2.7	3.1	277	6	4	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10826	5.5	4.3	392	10	6	1	0
10827	4.7	3.5	314	8	6	1	1
10828	5.0	5.9	525	13	9	3	1
10829	15.5	58.8	5181	145	92	27	5
10830	34.5	48.7	4275	123	80	23	4
10831	33.8	54.3	4751	142	93	28	1
10832	42.7	53.7	4694	141	93	28	1
10833	15.7	50.0	4358	132	87	26	3
10834	26.3	38.8	3365	104	69	21	3
10835	29.1	33.8	2880	115	64	20	0
10836	32.7	37.9	3244	124	69	21	1
10837	27.2	41.7	3588	133	73	23	1
10838	35.0	44.0	3783	139	75	23	4
10839	28.4	48.6	4204	151	81	25	3
10840	44.0	53.5	4644	166	89	27	0
10841	30.7	58.9	5115	182	97	29	0
10842	38.3	68.9	5936	221	121	37	0
10843	36.5	122.6	10192	446	260	84	12
10844	38.5	155.3	12776	584	346	113	19
10845	41.2	202.1	16450	788	471	156	29
10846	43.0	146.5	11712	642	382	127	0
10847	39.8	145.9	11805	612	361	120	0
10848	33.2	136.1	11274	510	294	95	11
10849	24.6	110.6	9303	398	225	71	0
10850	37.1	106.4	9031	370	205	64	0
10851	59.4	110.3	9492	361	195	58	0
10852	50.7	96.5	8329	307	163	48	6
10853	40.1	86.3	7452	271	143	42	8
10854	47.3	76.4	6632	240	126	38	0
10855	34.1	72.4	6258	230	121	36	3
10856	39.6	69.7	6011	223	117	35	5
10857	48.1	63.7	5517	203	107	32	0
10858	36.7	56.1	4840	186	95	29	0
10859	35.3	43.9	3814	132	75	23	0
10860	25.2	39.3	3458	104	64	19	0
10861	36.5	34.8	3067	91	55	16	0
10862	9.0	33.1	2921	85	52	16	1
10863	6.5	26.5	2308	81	42	13	1
10864	1.0	22.0	1944	55	34	10	0
10865	8.0	21.4	1884	55	34	10	1
10866	8.8	16.1	1377	41	30	11	3
10867	6.3	12.5	1039	32	27	12	4
10868	6.0	11.9	991	34	27	12	0
10869	9.4	10.8	914	27	23	11	0
10870	5.0	10.6	889	28	21	11	1
10871	4.6	8.2	677	26	18	10	0
10872	4.4	9.0	759	27	18	9	0
10873	5.4	8.9	749	26	18	9	0
10874	5.4	7.6	642	21	15	7	1
10875	2.5	7.7	660	19	16	7	0
10876	5.4	9.5	838	20	15	7	0
10877	7.8	7.6	656	16	12	6	2
10878	7.0	29.9	2559	81	56	20	5
10879	2.8	33.7	2868	95	65	23	4
10880	5.4	8.1	709	18	13	5	1
10881	4.7	7.3	643	18	10	5	1
10882	8.7	5.7	511	11	8	4	0
10883	5.1	4.4	396	8	6	2	0
10884	5.6	4.2	391	7	5	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10885	12.5	4.3	389	8	6	2	0
10886	13.6	12.4	1114	26	17	6	0
10887	6.0	4.4	374	18	11	0	0
10888	13.1	5.5	495	14	8	0	0
10889	12.0	4.5	411	11	7	0	0
10890	9.7	5.7	524	12	6	0	0
10891	12.1	5.5	489	12	7	3	0
10892	8.0	7.5	673	17	10	4	0
10893	1.3	2.2	191	6	4	1	0
10894	6.1	2.4	216	5	4	1	0
10895	8.1	2.1	183	6	3	2	0
10896	4.7	1.7	147	5	3	1	0
10897	4.7	1.2	108	3	2	1	0
10898	6.5	1.4	119	3	3	1	1
10899	5.2	1.1	101	3	1	0	0
10900	8.5	1.3	111	4	2	1	1
10901	8.3	1.0	82	3	2	1	1
10902	5.7	0.9	79	2	2	1	0
10903	7.1	0.9	80	2	2	1	0
10904	6.4	1.0	83	3	2	1	0
10905	3.9	0.8	66	2	2	0	0
10906	4.2	1.0	88	2	2	1	1
10907	4.0	1.4	124	3	2	0	0
10908	6.9	1.7	154	5	2	1	0
10909	3.4	1.7	156	4	2	1	0
10910	2.5	1.7	152	3	2	1	0
10911	3.6	1.5	139	3	2	1	0
10912	2.5	1.1	99	3	2	0	0
10913	5.5	1.1	104	2	1	0	0
10914	7.5	1.7	146	4	2	1	1
10915	1.1	2.2	194	5	3	0	1
10916	5.0	2.3	204	5	3	1	1
10917	4.7	2.3	202	5	3	1	0
10918	6.2	2.0	181	4	3	1	0
10919	2.4	1.7	153	4	2	1	1
10920	5.1	1.3	119	3	2	1	0
10921	4.8	1.4	113	4	2	1	1
10922	1.3	1.0	88	4	2	0	0
10923	3.2	1.0	86	4	2	0	0
10924	4.5	1.9	169	3	2	1	0
10925	4.1	1.9	174	3	2	0	0
10926	4.3	2.0	173	4	2	1	1
10927	3.6	1.9	170	4	2	1	1
10928	4.3	3.3	306	5	3	0	1
10929	4.1	2.7	247	4	3	1	1
10930	8.0	2.0	180	3	3	0	1
10931	5.0	1.9	175	3	2	0	0
10932	5.0	2.0	184	4	2	1	0
10933	5.4	2.0	184	4	2	1	0
10934	2.3	1.9	174	4	2	0	0
10935	4.5	1.6	145	3	2	0	0
10936	1.9	1.5	141	3	2	0	0
10937	5.7	1.9	166	4	3	1	0
10938	18.2	2.6	231	6	4	1	0
10939	11.6	2.8	233	8	5	1	1
10940	15.7	3.9	332	13	8	3	0
10941	13.9	2.5	223	6	4	1	0
10942	13.1	2.4	214	6	3	1	0
10943	14.4	2.1	193	4	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
10944	11.1	2.5	232	4	2	1	0
10945	14.7	2.2	200	4	3	0	1
10946	14.0	2.1	192	4	2	0	0
10947	10.7	2.4	221	5	3	1	0
10948	13.9	1.1	102	2	1	0	0
10949	12.4	5.3	477	11	8	2	0
10950	19.9	4.5	403	10	7	2	0
10951	15.9	3.0	268	6	4	1	1
10952	15.2	2.6	237	6	3	0	0
10953	37.6	3.3	301	8	4	0	1
10954	25.0	3.5	324	8	5	0	0
10955	23.3	3.9	352	8	5	1	0
10956	27.5	4.6	422	10	6	1	0
10957	35.8	4.7	428	10	6	1	0
10958	26.5	5.1	465	10	6	1	0
10959	40.4	5.0	459	11	6	1	0
10960	22.4	4.5	407	12	6	1	0
10961	24.0	4.6	420	9	6	1	0
10962	19.4	4.5	410	9	6	1	0
10963	27.9	4.6	417	10	6	1	0
10964	24.7	4.4	402	10	6	0	0
10965	27.7	4.3	394	9	6	1	0
10966	28.1	4.7	436	10	6	0	0
10967	26.9	6.5	587	14	9	1	0
10968	19.1	7.0	631	16	10	2	0
10969	2.1	4.3	395	8	6	1	0
10970	28.0	6.3	589	10	6	1	1
10971	18.2	8.3	768	15	10	2	0
10972	41.6	7.4	685	12	7	1	0
10973	19.9	6.7	624	10	6	1	1
10974	10.7	6.2	576	10	5	1	1
10975	12.2	5.8	543	9	5	1	0
10976	11.9	5.7	535	9	5	1	1
10977	11.9	5.3	494	7	4	1	1
10978	11.2	4.7	432	7	4	1	1
10979	11.0	4.8	444	8	4	1	1
BALCONES Fm.							
10980	10.3	5.6	523	9	5	1	0
10981	15.9	5.5	515	10	6	1	0
10982	29.2	4.9	454	8	5	1	0
10983	23.2	5.4	483	10	8	2	1
10984	11.9	4.5	413	8	6	1	0
10985	9.9	3.9	358	7	5	0	0
10986	8.5	3.6	331	6	4	1	0
10987	12.0	3.6	330	6	4	1	1
10988	12.4	4.2	393	8	4	0	0
10989	14.5	4.1	379	7	4	0	0
10990	14.5	4.1	380	7	4	1	1
10991	12.0	3.9	363	6	4	1	0
10992	10.9	4.0	375	7	4	1	0
10993	25.5	3.9	359	7	4	1	0
10994	10.6	4.1	378	9	4	1	0
10995	7.8	3.7	336	7	4	1	0
10996	5.8	3.3	302	6	4	1	0
10997	11.0	3.9	355	7	5	1	0
10998	8.2	4.2	379	7	5	0	2
10999	13.5	4.1	376	7	4	1	1
11000	15.1	3.8	354	6	4	1	0
11001	7.7	3.6	328	7	4	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
11002	6.3	3.3	307	6	4	0	1
11003	18.3	3.2	299	5	3	0	0
11004	10.5	3.0	284	5	3	1	0
11005	6.6	3.7	341	6	4	1	1
11006	10.6	6.4	593	13	7	1	0
11007	20.2	6.0	557	10	6	1	1
11008	29.4	5.5	495	12	6	1	1
11009	24.1	6.1	554	12	7	2	1
11010	16.5	6.4	588	14	7	1	0
11011	15.2	7.5	687	14	8	2	0
11012	13.6	10.3	942	21	12	3	0
11013	25.8	6.8	623	13	8	2	0
11014	29.1	4.9	448	9	5	2	1
11015	10.5	4.3	400	7	4	0	0
11016	18.2	4.2	386	6	4	1	1
11017	14.5	4.1	385	6	4	1	0
11018	11.3	4.0	377	6	4	0	0
11019	17.1	3.8	360	6	4	0	0
11020	7.7	3.4	320	5	3	0	1
11021	10.7	3.6	331	6	3	0	1
11022	12.1	3.7	343	7	4	1	1
11023	18.6	3.9	361	8	4	0	0
11024	18.6	4.3	398	8	5	1	0
11025	17.2	4.6	422	9	5	0	1
11026	13.6	4.5	415	8	5	0	0
11027	20.0	4.1	387	7	4	0	0
11028	21.1	2.8	258	5	3	0	0
11029	26.0	0.2	18	1	0	0	0
11030	21.3	2.1	202	4	2	0	0
11031	19.2	3.1	280	5	3	2	1
11032	20.4	3.2	296	5	3	1	1
11033	13.5	3.4	310	6	3	1	1
11034	11.8	3.2	293	5	3	1	0
11035	17.7	3.3	307	6	3	1	0
11036	15.7	3.6	336	6	4	1	0
11037	11.9	4.2	377	10	6	1	1
11038	12.6	4.2	377	10	6	1	1
11039	16.2	4.1	365	11	5	1	0
11040	12.3	4.9	446	10	6	1	0
11041	15.7	4.8	444	10	6	1	0
11042	15.7	5.2	474	11	6	1	0
11043	15.7	5.6	503	12	7	1	1
11044	17.1	5.4	490	12	7	1	1
11045	14.0	5.4	484	13	7	1	1
11046	15.7	5.2	474	13	7	1	0
11047	15.4	5.5	498	10	7	1	1
11048	20.7	4.7	426	9	5	1	1
11049	12.2	3.3	301	6	3	1	1
11050	16.1	3.5	328	6	3	1	0
11051	9.4	3.4	319	6	3	0	0
11052	15.6	3.2	291	6	3	1	0
11053	13.3	3.0	275	5	3	0	1
11054	12.2	2.7	255	5	2	0	0
11055	11.4	2.6	243	5	2	0	1
11056	12.8	3.7	338	7	4	1	1
11057	11.1	4.5	408	9	5	0	1
11058	14.2	5.5	505	10	6	1	1
11059	15.6	5.4	490	10	7	1	1
11060	17.4	6.1	555	13	8	0	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
11061	17.4	6.5	588	15	9	2	0
11062	35.0	6.3	568	15	9	2	0
11063	22.4	6.4	577	14	9	2	0
11064	13.7	6.3	571	14	8	1	0
11065	9.1	6.0	547	11	7	1	1
11066	12.9	6.3	578	11	7	2	1
11067	16.6	6.2	570	11	7	2	0
11068	16.7	6.1	561	11	7	1	1
11069	20.7	5.6	516	10	6	1	1
11070	26.1	5.4	502	10	6	1	0
11071	18.7	5.3	491	10	6	1	0
11072	19.6	5.3	485	9	6	1	1
11073	16.1	5.2	480	9	6	1	0
11074	13.7	5.0	461	10	6	1	0
11075	13.9	4.6	417	8	5	1	1
11076	20.7	4.1	374	8	5	1	1
11077	20.5	3.8	347	6	5	1	1
11078	15.8	3.6	327	6	5	1	0
11079	13.8	3.5	320	6	4	1	0
11080	40.0	3.4	307	6	4	1	0
11081	8.4	3.5	316	6	5	1	1
11082	11.4	3.7	333	8	5	1	0
11083	12.3	4.0	358	9	6	1	0
11084	33.4	3.8	343	9	6	1	0
11085	15.5	3.5	304	10	6	1	0
11086	12.9	4.0	344	12	7	1	1
11087	11.7	4.0	354	11	7	1	1
11088	33.0	3.9	341	11	7	1	1
11089	26.3	3.7	324	11	7	1	0
11090	22.1	3.6	315	12	6	1	0
11091	22.3	3.4	294	9	6	1	1
11092	17.9	3.1	276	9	6	1	0
11093	33.6	3.1	267	8	6	1	1
11094	20.5	3.1	267	8	6	1	1
11095	20.5	3.1	267	8	6	1	1

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SAVIA

INTERVALS (Meters)	FORMATION	NATURAL FLUORESCENCE						COLOR	SPEED CUT				REACTION			INTENSITY CUT				FORM CUT			COLOR CUT	RESIDUAL RING	
		NIL	TRACES	POOR	FAIR	GOOD	%		CRUSH	SLOW	FAST	FLASH	FAINT	WEAK	STRONG	DULL	FAINT	PALE	BRIGHT	EVEN	BLOOMING	STREAMING		U.V.L.	NAT. L.
3410 - 3440	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
3440 - 3470	RIO BRAVO						10	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
3470 - 3500	RIO BRAVO						5	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
3500 - 3530	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
3530 - 3560	RIO BRAVO						5	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
3560 - 3590	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
3800 - 3830	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
3830 - 3860	RIO BRAVO						10	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
3860 - 3890	RIO BRAVO						5	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
3920 - 3950	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
3950 - 3980	RIO BRAVO						10	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
3980 - 4010	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4010 - 4040	RIO BRAVO						20	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4040 - 4070	RIO BRAVO						30	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4070 - 4100	RIO BRAVO						5	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4100 - 4130	RIO BRAVO						5	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4220 - 4250	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4250 - 4280	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4400 - 4430	RIO BRAVO		X				50	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4430 - 4460	RIO BRAVO		X				50	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL

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SAVIA

INTERVALS (Meters)	FORMATION	NATURAL FLUORESCENCE						COLOR	SPEED CUT				REACTION			INTENSITY CUT				FORM CUT			COLOR CUT	RESIDUAL RING	
		NIL	TRACES	POOR	FAIR	GOOD	%		CRUSH	SLOW	FAST	FLASH	FAINT	WEAK	STRONG	DULL	FAINT	PALE	BRIGHT	EVEN	BLOOMING	STREAMING		U.V.L.	NAT. L.
4460 - 4490	RIO BRAVO						50	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4490 - 4520	RIO BRAVO						30	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4520 - 4550	RIO BRAVO						40	PAL YELL		X				X			X			X			YELSH WH	MKY WH	NIL
4550 - 4580	RIO BRAVO						60	GOL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4580 - 4610	RIO BRAVO						30	PAL YELL		X				X			X			X			YELSH WH	MKY WH	NIL
4610 - 4640	RIO BRAVO						20	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4640 - 4670	RIO BRAVO						30	PAL YELL		X				X			X			X			YELSH WH	MKY WH	NIL
4670 - 4700	RIO BRAVO						35	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4700 - 4730	RIO BRAVO						20	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4730 - 4760	RIO BRAVO						10	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4760 - 4790	RIO BRAVO						5	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4790 - 4820	RIO BRAVO						5	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4820 - 4850	RIO BRAVO						5	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4850 - 4880	RIO BRAVO						TR	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4880 - 4910	RIO BRAVO						25	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4910 - 4940	RIO BRAVO						25	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4940 - 4970	RIO BRAVO						5	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
4970 - 5000	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
5000 - 5030	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
5030 - 5060	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL

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SAVIA

INTERVALS (Meters)	FORMATION	NATURAL FLUORESCENCE						COLOR	SPEED CUT				REACTION			INTENSITY CUT				FORM CUT			COLOR CUT	RESIDUAL RING	
		NIL	TRACES	POOR	FAIR	GOOD	%		CRUSH	SLOW	FAST	FLASH	FAINT	WEAK	STRONG	DULL	FAINT	PALE	BRIGHT	EVEN	BLOOMING	STREAMING		U.V.L.	NAT. L.
5060 - 5090	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
5090 - 5120	RIO BRAVO		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
5590 -6600	MOGOLLON		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
6600 - 6610	MOGOLLON		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
6610 - 6620	MOGOLLON		X					PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
6620 - 6630	MOGOLLON						10	PAL YELL		X				X				X		X			YELSH WH	MKY WH	NIL
6630 - 6640	MOGOLLON						20	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6640 - 6650	MOGOLLON						10	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6650 - 6660	MOGOLLON						25	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6660 - 6670	MOGOLLON						25	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6670 - 6680	MOGOLLON						10	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6680 - 6690	MOGOLLON						20	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6690 - 6700	MOGOLLON						15	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6700 - 6710	MOGOLLON						10	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6710 - 6720	MOGOLLON						15	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6720 - 6730	MOGOLLON						15	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6730 - 6740	MOGOLLON						20	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6740 - 6750	MOGOLLON						20	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6750 - 6760	MOGOLLON						15	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6760 - 6770	MOGOLLON						20	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL

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SAVIA

INTERVALS (Meters)	FORMATION	NATURAL FLUORESCENCE						COLOR	SPEED CUT				REACTION			INTENSITY CUT				FORM CUT			COLOR CUT	RESIDUAL RING	
		NIL	TRACES	POOR	FAIR	GOOD	%		CRUSH	SLOW	FAST	FLASH	FAINT	WEAK	STRONG	DULL	FAINT	PALE	BRIGHT	EVEN	BLOOMING	STREAMING		U.V.L.	NAT. L.
6770 - 6780	MOGOLLON						10	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6780 - 6790	MOGOLLON						20	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6790 - 6800	MOGOLLON						15	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6800 - 6810	MOGOLLON						10	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6810 - 6820	MOGOLLON						10	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6820 - 6830	MOGOLLON						15	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6830 - 6840	MOGOLLON						15	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6840 - 6850	MOGOLLON						30	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6850 - 6860	MOGOLLON						20	PAL YELSH WH			X		X					X	X		X		WHSH YEL	WHSH YEL	NIL
6860 - 6870	MOGOLLON						20	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6870 - 6880	MOGOLLON						10	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6880 - 6890	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6890 - 6900	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6900 - 6910	MOGOLLON						10	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6910 - 6920	MOGOLLON						10	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6920 - 6930	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6930 - 6940	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6940 - 6950	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6950 - 6960	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6960 - 6970	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL

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FLUORESCENCE DATA RECORD

WELL: LO6-27D

SAVIA PERÚ

INTERVALS (Meters)	FORMATION	NATURAL FLUORESCENCE						COLOR	SPEED CUT				REACTION			INTENSITY CUT				FORM CUT			COLOR CUT	RESIDUAL RING	
		NIL	TRACES	POOR	FAIR	GOOD	%		CRUSH	SLOW	FAST	FLASH	FAINT	WEAK	STRONG	DULL	FAINT	PALE	BRIGHT	EVEN	BLOOMING	STREAMING		U.V.L.	NAT. L.
6970 - 6980	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6980 - 6990	MOGOLLON		X					PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
6990 -7000	MOGOLLON		X					PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7000 - 7010	MOGOLLON		X					PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7130 - 7140	MOGOLLON		X					PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7180 - 7190	MOGOLLON		X					PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7270 - 7280	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7280 - 7290	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7290 - 7300	MOGOLLON						10	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7300 - 7310	MOGOLLON						15	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7310 - 7320	MOGOLLON						15	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7320 - 7330	MOGOLLON						15	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7330 - 7340	MOGOLLON						10	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7340 - 7350	MOGOLLON						10	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7350 - 7360	MOGOLLON						10	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7360 - 7370	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7370 - 7380	MOGOLLON						10	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7380 - 7390	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7390 - 7400	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7400 - 7410	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL

T.G.T - LAB
REGISTROS GEOLÓGICOS

FLUORESCENCE DATA RECORD

WELL: LO6-27D

SAVIA PERÚ

INTERVALS (Meters)	FORMATION	NATURAL FLUORESCENCE						COLOR	SPEED CUT				REACTION			INTENSITY CUT				FORM CUT			COLOR CUT	RESIDUAL RING	
		NIL	TRACES	POOR	FAIR	GOOD	%		CRUSH	SLOW	FAST	FLASH	FAINT	WEAK	STRONG	DULL	FAINT	PALE	BRIGHT	EVEN	BLOOMING	STREAMING		U.V.L.	NAT. L.
7410 -7420	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7420 - 7430	MOGOLLON		X					PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7440 - 7450	MOGOLLON						15	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7450 - 7460	MOGOLLON						15	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7460 - 7470	MOGOLLON		X					PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7470 - 7480	MOGOLLON						15	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7480 - 7490	MOGOLLON						15	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7490 - 7500	MOGOLLON						10	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7500 - 7510	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7510 - 7520	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7520 - 7530	MOGOLLON						5	PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
7540 - 7550	MOGOLLON		X					PAL YELSH WH		X			X					X		X			WHSH YEL	WHSH YEL	NIL
9360 - 9370	SAN CRISTOBAL		X					PAL YELSH	X				X					X				X	YELSH WH	MKY WH	NIL
9370 - 9380	SAN CRISTOBAL						7	PAL YELSH	X				X					X				X	YELSH WH	MKY WH	NIL
9380 - 9390	SAN CRISTOBAL						10	PAL YELSH	X				X					X				X	YELSH WH	MKY WH	NIL
9390 - 9400	SAN CRISTOBAL						5	PAL YELSH	X				X					X				X	YELSH WH	MKY WH	NIL
9400 - 9410	SAN CRISTOBAL						5	PAL YELSH	X				X					X				X	YELSH WH	MKY WH	NIL
9410 - 9420	SAN CRISTOBAL		X					PAL YELSH	X				X					X				X	YELSH WH	MKY WH	NIL
9420 - 9430	SAN CRISTOBAL		X					PAL YELSH	X				X					X				X	YELSH WH	MKY WH	NIL
10340 - 10350	SAN CRISTOBAL		X					PL YELSH		X				X				X		X			YELSH WH	MKY WH	NIL

T.G.T - LAB
REGISTROS GEOLÓGICOS

FLUORESCENCE DATA RECORD

WELL: LO6-27D

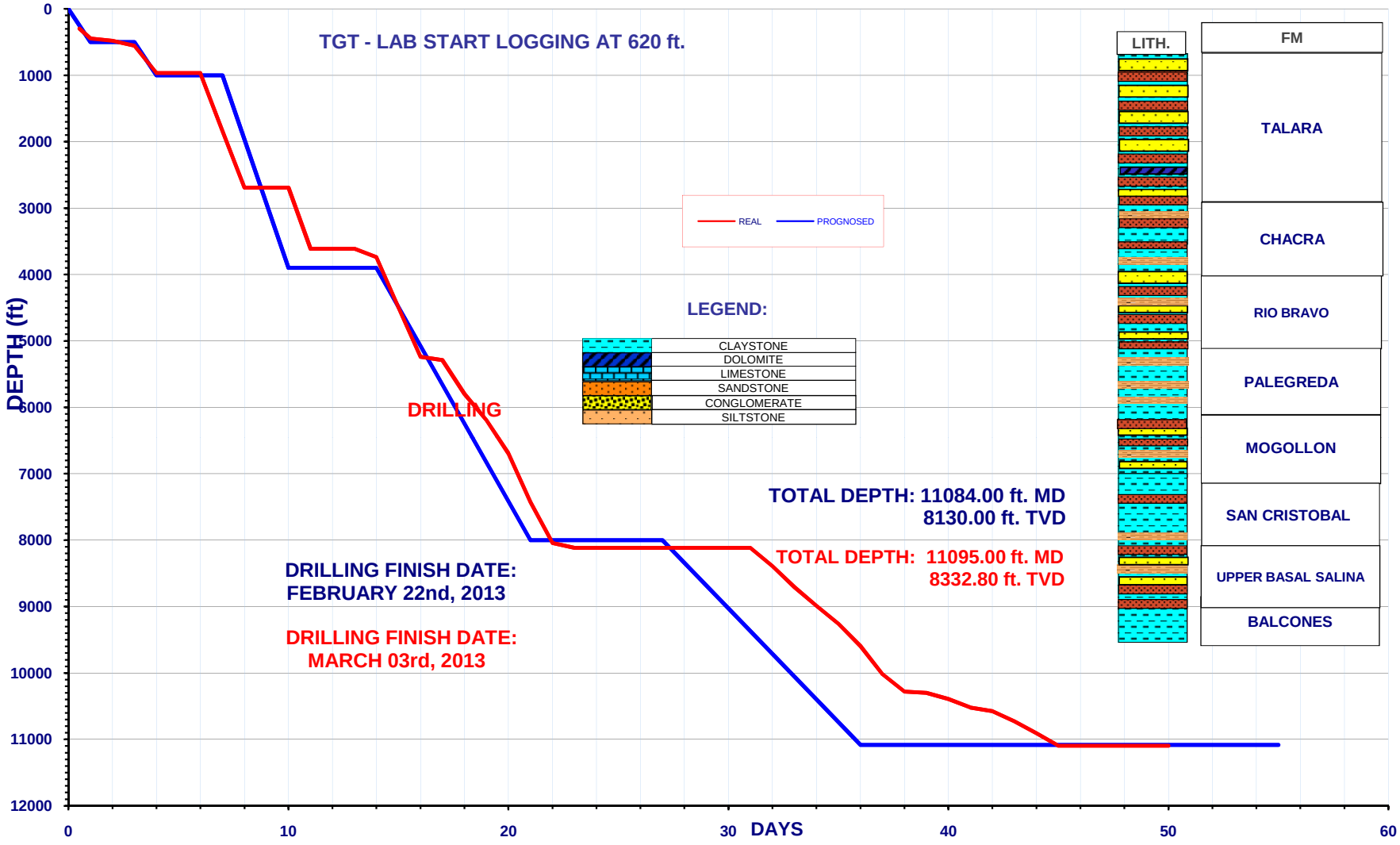
SAVIA

INTERVALS (Meters)	FORMATION	NATURAL FLUORESCENCE						COLOR	SPEED CUT				REACTION			INTENSITY CUT				FORM CUT			COLOR CUT	RESIDUAL RING	
		NIL	TRACES	POOR	FAIR	GOOD	%		CRUSH	SLOW	FAST	FLASH	FAINT	WEAK	STRONG	DULL	FAINT	PALE	BRIGHT	EVEN	BLOOMING	STREAMING		U.V.L.	NAT. L.
10830 - 10840							10	PL YEL	X				X					X				X	YELSH WH	MKY WH	NIL
10840 - 10850							10	PL YEL	X				X					X				X	YELSH WH	MKY WH	NIL
10850 - 10860							15	PL YEL	X				X					X				X	YELSH WH	MKY WH	NIL
10860 - 10870							10	PL YEL	X				X					X				X	YELSH WH	MKY WH	NIL
10880 - 10890			X					PL YEL		X			X				X				X		YELSH WH	MKY WH	NIL

T.G.T - LAB
REGISTROS GEOLÓGICOS

DRILLING PROGRESS CURVE
WELL : LO6-27D

SAVIA PERÚ



T.G.T - LAB
REGISTROS GEOLÓGICOS

BIT RECORD

WELL: LO6-27D

SAVIA PERU

* STARTED MUD LOGGING @ 620 ft.

BIT	SIZE	MAKE	TYPE	SERIAL	DEPTH		HOLE	ROP Efective	HOURS	HOURS	JETS	GPM/PSI	WOB/RPM Klbs / rpm	IADC
	IN				IN	OUT	Made	M/HR	Total	Drilling				
2R	17	HALLIBURTON	XT1RC	1118871	480	968	488	97,4	63,4	5,0	4X16	850/1680	10-20/60	1-1-RR-A-1-I-NO-TD
3	12 1/4	SMITH	SDi419	JG2134	968	3614	2646	198,8	159,4	13,3	3X13;3X14	750/2500	8-10/50	1-2-CT-T-X-I-NO-TD
4	8 1/2	NOV	MSH516D	10055	3614	5256	1642	68,4	74,5	24,0	5X13	420/1300	12-15/50	1-1-RR-S-X-1/32-NO-HP
4R	8 1/2	NOV	MSH516D	10055	5256	5798	542	35,1	31,3	15,4	5X16	450/1180	10-15/70	1-2-CT-G-X-1/16-NO-BHA
5	8 1/2	NOV	MSF516M	130550	5798	8114	2316	45,1	108,2	51,3	7X12	450/2800	15-20/60	1-1-ER-H-X-I-NO-TD
6	6 1/8	SMITH	M513	JX8927	8114	10302	2188	25,1	181,3	87,0	5X11;2X13	210/3190	10-20/60	1-3-CT-G-X-2-NO-ROP
7	6 1/8	SMITH	MSi513	JY6674	10302	10573	271	7,0	63,0	38,8	3X14;2X15	200/3400	15-25/80	1-0-CT-N-X-I-PN-ROP
8R	6 1/8	SMITH	Mi513UBPX	JE3026	10573	11095	522	11,3	88,1	46,2	5X16	200/3580	15-25/80	0-0-NO-A-X-I-PN-TD

FORMATIONS:	MD (ft)	TVD (ft)
TALARA	0	0,0
CHACRA	2860	2517,6
RIO BRAVO	3405	2890,4
PALEGREDA	5736	4479,1
MOGOLLON	6330	4899,6

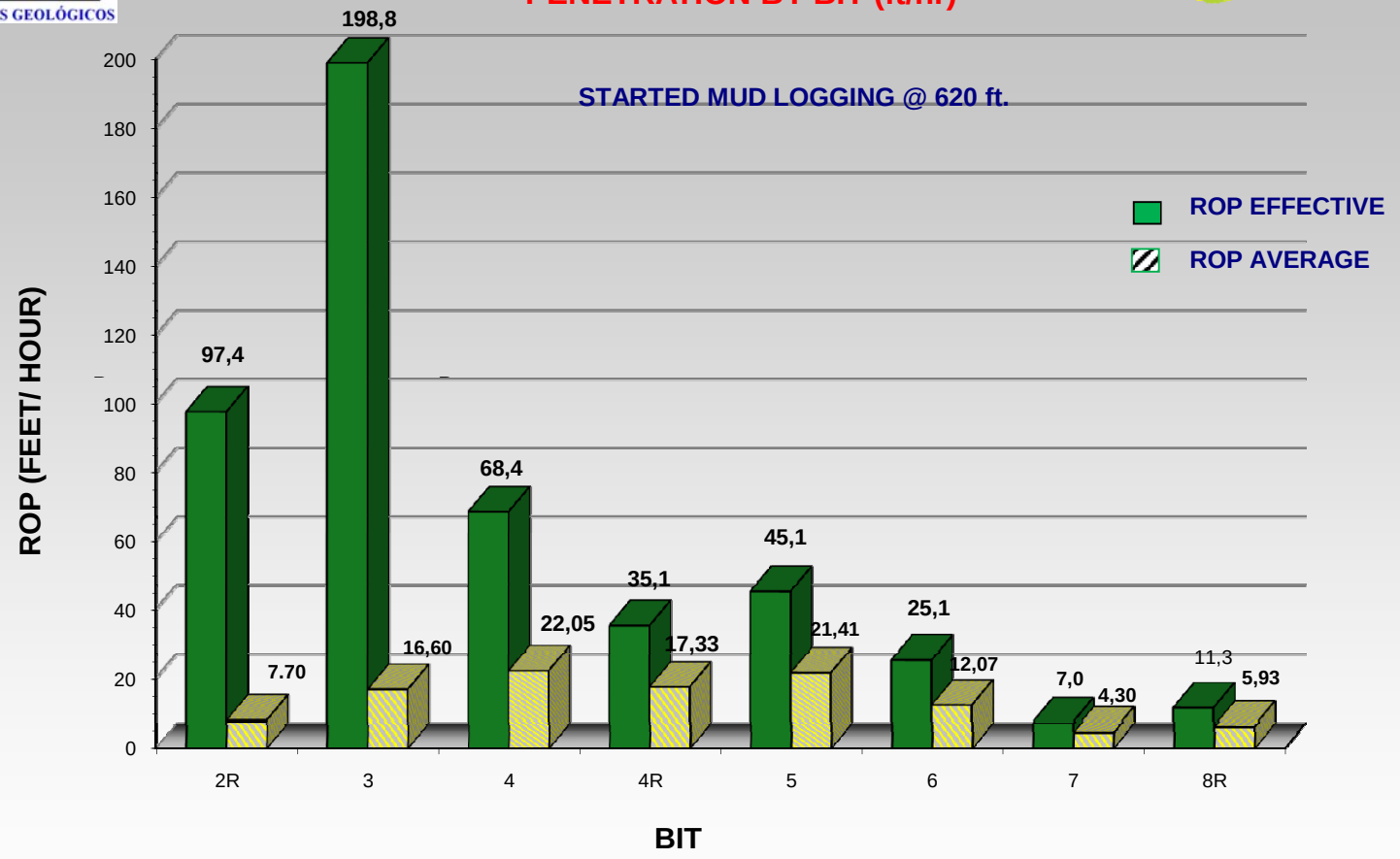
FORMATIONS:	MD (ft)	TVD (ft)
SAN CRISTOBAL	8229	6200,5
UPPER BASAL SALINA	10332	7683,9
LOWER BASAL SALINA	-	-
BALCONES	10980	8228,7
TD	11095	8332,8

T.G.T - LAB
REGISTROS GEOLÓGICOS

SAVIA PERÚ

WELL : LO6-27D

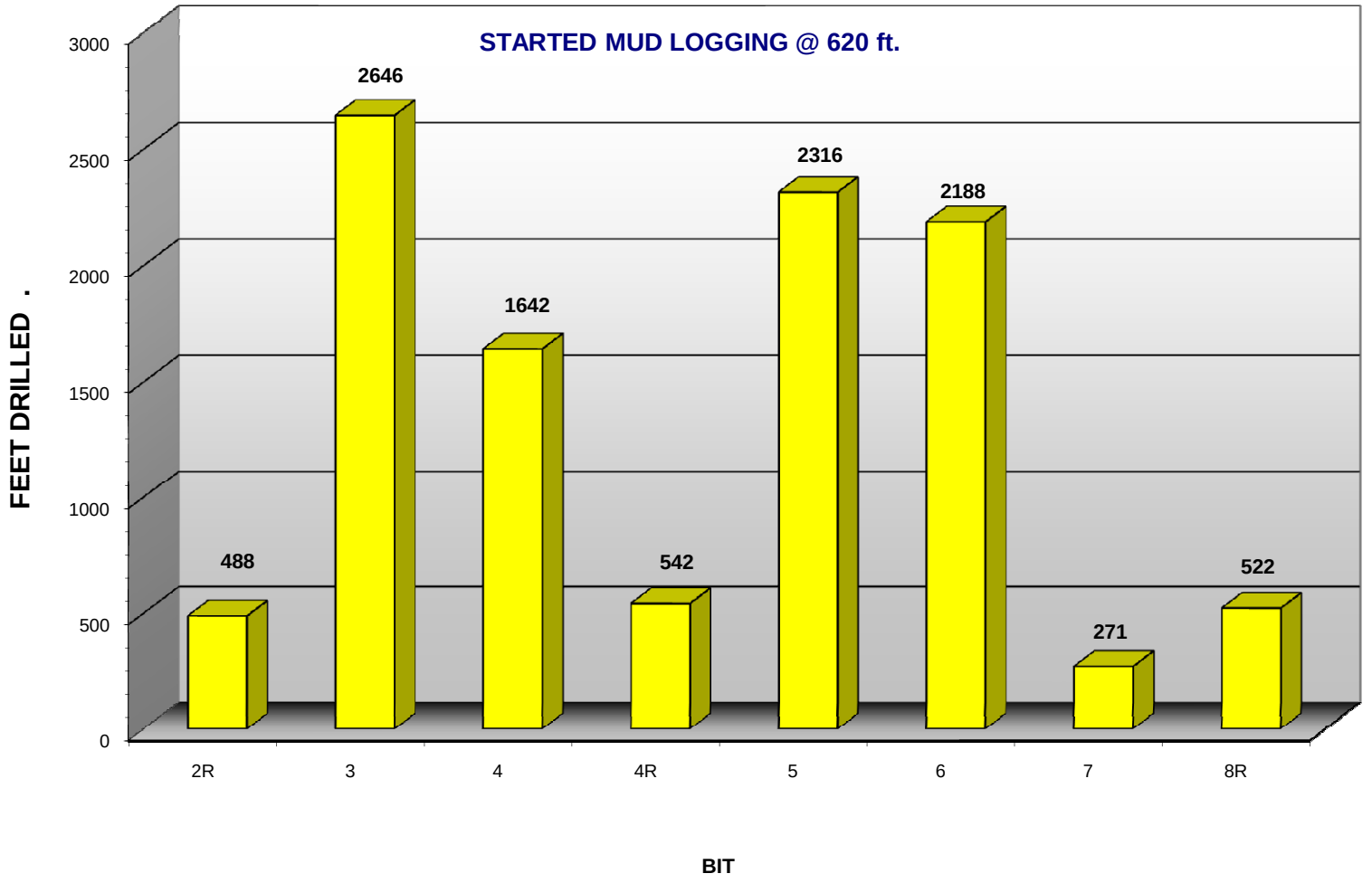
EFECTIVE AND AVERAGE RATE OF PENETRATION BY BIT (ft/hr)



T.G.T - LAB
REGISTROS GEOLÓGICOS

SAVIA PERÚ

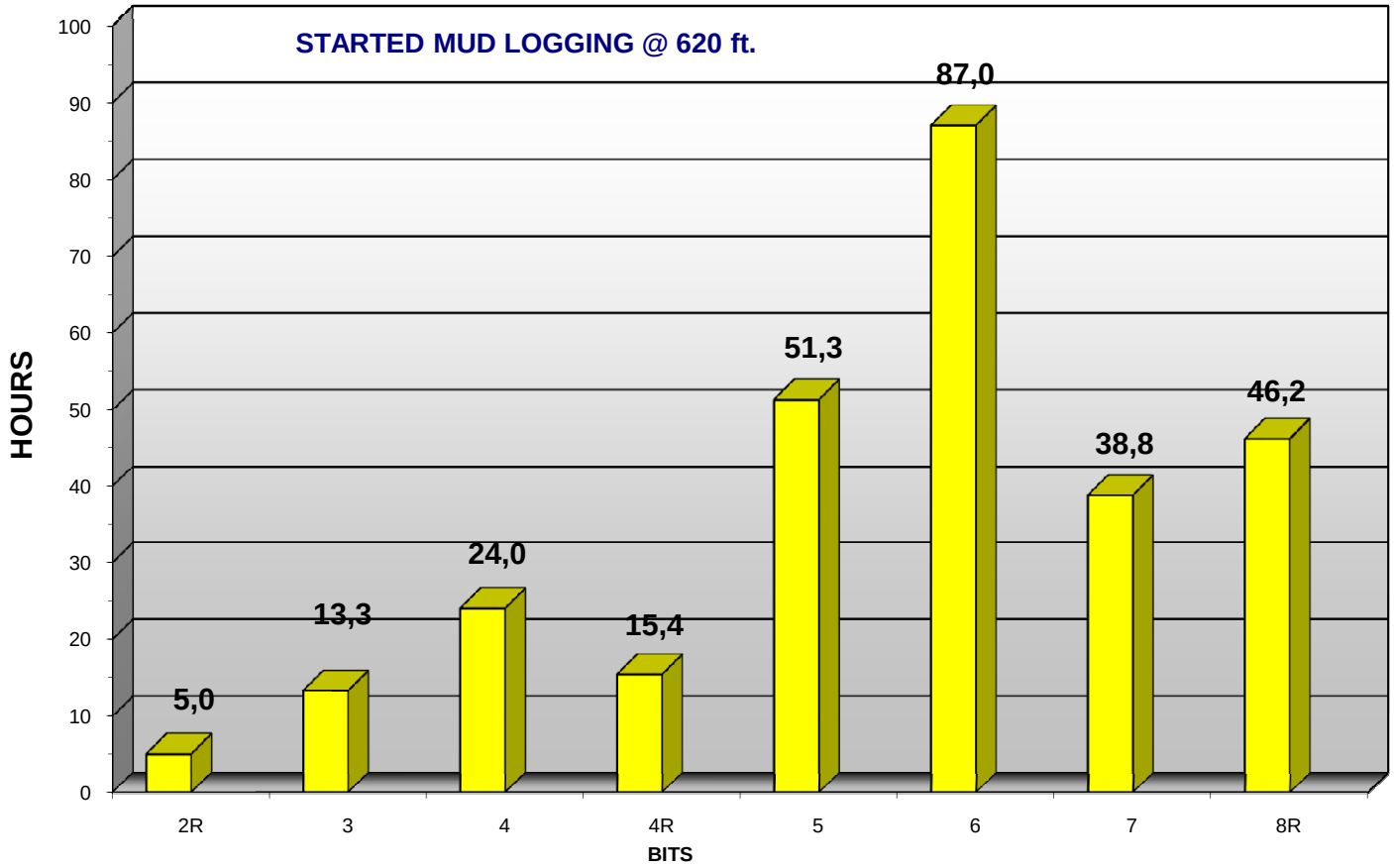
WELL : LO6-27D
FEET DRILLING BY BIT



T.G.T - LAB
REGISTROS GEOLÓGICOS

SAVIA PERÚ

WELL : LO6-27D
EFFECTIVE DRILLING HOURS



DAILY OPERATIONS REPORTS

WELL: LO6-27D

January 21st, 2013

00:00 - 02:30	Dir. drill slide from 552 ft to 582 ft. with 700 gpm, 1180 psi.
02:30 - 03:30	Circulate, ream , L/D 2 jt, take Gyro survey @ 531', inc 0.96 deg, azm 3.96 deg
03:30 - 04:30	Dir drill rotate from 582 ft to 608 ft. with 710 gpm, 1190 psi. 60rpm.10-12 klb Wob.
04:30 - 05:30	Circulate, ream, take Gyro survey @ 562', inc 0.4 deg, azm 0.66 deg
05:30 - 07:00	Drill sliding from 608 ft to 642 ft, with 710 gpm, 1300 psi. 10/15 klb wob.
07:00 - 08:00	Circulate, ream and take Gyro survey @ 594 ft, inc 0.56 deg, tool face azm 247.14 deg. Phoenix DD orienting TF to 229.9 deg.
08:00 - 10:00	Drill sliding from 642 ft to 664 ft, 800 gpm, press 1750 psi, 15/20 klbs wob, rop avg 15.5 ft/hr.
10:00 - 11:30	Drill rotating from 664 ft to 700 ft, 720 gpm, press 1300 psi, 15/25 klbs wob, 60 rpm, tq 1/2 kft-lb, ROP avg 25.1 ft/hr.
11:30 - 12:30	Circulate, ream and take Gyro survey @ 654 ft, inc 1.82 deg, tool face azm 204.71 deg. Phoenix DD orienting TF to 190 deg.
12:30 - 15:00	Drill sliding from 700 ft to 747 ft, 730 gpm, press 1400 psi, 15/25 klbs wob, rop avg 18.1 ft/hr. Last geology sample at 740 ft: 50% Sst, 40% Sd, 10% Clyst.
15:00 - 16:00	Drill rotating from 747 ft to 791 ft, 750 gpm, press 1500 psi, 15/25 klbs wob, 60 rpm, tq 1/2 kft-lb, ROP avg 62.85 ft/hr.
16:00 - 17:00	Circulate, ream and take Gyro survey @ 744 ft, inc 4.32 deg, tool face azm 196.46 deg. Phoenix DD orienting TF to 21.52R deg.
17:00 - 18:00	Drill sliding from 791 ft to 835 ft, 750 gpm, press 1500 psi, 15/25 klbs wob, rop avg 37.7 ft/hr.
18:00 - 19:30	Drill rotating from 835 ft to 886 ft, 750 gpm, press 1500 psi, 15/25 klbs wob, 70 rpm, tq 1/3 kft-lb, ROP avg 52.2 ft/hr.
19:30 - 20:30	Circulate, ream and take Gyro survey @ 839 ft, inc 7.81 deg, tool face azm 196.62 deg. Phoenix DD orienting TF to 0 deg.
20:30 - 22:00	Drill sliding from 886 ft to 920 ft, 720 gpm, press 1450 psi, 15/25 klbs wob, rop avg 22.7 ft/hr.
22:00 - 23:00	Drill rotating from 920 ft to 968 ft, 720 gpm, press 1500 psi, 15/25 klbs wob, 70 rpm, tq 2/4 kft-lb, ROP avg 48 ft/hr.
23:00 - 24:00	Circulate a bottom up at 968 ft, pump 30 bbl HVP and continue circulate with 720 gpm, 1500 psi up to shakers clean.

January 22nd, 2013

00:00 - 00:30	Take Gyro survey @ 914', inc 9.82 deg, azm 190.73 deg.
00:30 - 02:00	Perform short trip: POOH from bottom (968 ft) to shoe 438 ft with back reaming and reaming with 650 gpm & 1100 psi.
02:00 - 03:00	RIH from 438 ft to bottom 986 ft, last stand wash down. Run without restrictions.
03:00 - 04:00	Circulate a bottom up at 968 ft, pump 30 bbl HVP and continue circulate with 720 gpm, 1500 psi.
04:00 - 08:00	POOH from bottom 968 ft to surface with normal drag. L/D 17" Phoenix directional BHA: 5 stds 5" HWDP, x/o, 1jt 7 5/8" DC, 7 3/4" Hyd Jar, 2 jt 7 3/4" DC, 2 jt 7 3/4" DC, 15" STB, 8" UBHO, x/o Mud.

08:00 - 08:30	Perform safe and operative meeting with Pepesa, Halliburton, Sertong, Tramarsa, TGT Lab and Savia.
08:30 - 11:00	Install w/weld on 13 3/8" drillable guide shoe, 1 jt 13 3/8" csg, 13 3/8" drillable float collar, perform float valve test, ok. Continue run 4 jt 13 3/8" csg 54.5 #/ft, K-55, BTC, run csg to 150 ft.
11:00 - 12:00	n 5 th csg, rabbit don´t pass trought 13 3/8" csg, observed collapced 13 3/8" csg on middle body. Maenuver with platform crane to recover rabbit.
12:00 - 13:30	Continue running 26 jts (total) 13 3/8" CSG 54.5 #/ft, K-55, BTC, from 150 ft to 966 ft. Install 15 x 17" bow spring centralizer as program.
13:30 - 15:00	Last 13 3/8" casing wash down to bottom. Circulate and reciprocate csg with 300 gpm, 230 psi. While Sertong personnel R/D running tools equipment from rig floor.
15:00 - 15:30	Halliburton personnel install cementing head (botton & top plug) and connect cmt lines from Medomack to Platform. Continue circulate with 300 gpm, 230 psi.
15:30 - 16:00	Perform safety and operation meeting with Pepesa, Halliburton, United and Savia crew. Halliburton fill cmt lines with water fresh and perform test lines with 2000 psi, ok.
16:00 - 18:00	Drop bottom plug and pump 15 bbl of 8.4 ppg Mud Flush w/ 5 bpm, 250 psi. and then pump 25 bbl of 11.0 ppg Tuned Spacer w/5 bpm, 280 psi. Start mix lead slurry Econocem 12.5 ppg and pump 111 bbl of lead lead slurry 12.5 ppg (283 sxs Pacasmayo I cmt) with 5.0 bpm, 380 psi. Continue pump 59 bbl of tail slurry Halcem 15.2 ppg (259 sxs Pacasmayo I cmt) with 2-4 bpm, 120-320 psi. Release top plug and start displacement with 143 bbl of mud 9.5 ppg, 7-2 bpm, 480/290 psi, top plug perform bump plug on landing valve with 2,0 bpm, 290 psi and pressure with 1050 psi by 5 min. Observed full return by shakers and return Mud Flush and Spacer contaminated and 20 bbl contaminated cement and 23 bbl cement 12.3-12.5 ppg during displacement. Perform casing integrited test w/ 1000 psi by 5 min, ok. Perform back flow test, return 0.5 bbl, ok. Casing shoe at 966 ft, Float Valve at 925 ft.
18:00 - 21:00	Open Cmt head and discharge, R/D cmt lines. Pepesa welder open window on 18"csg, maneuver to center 13 3/8" csg, cut and weld ring between 18" conductor and 13 3/8" csg. L/D cmt head.
21:00 - 00:00	Pepesa cut 13 3/8" csg. N/D bell nipple, 21 1/4" diverter, drilling spool,18" extension.

January 23rd, 2013

00:00 - 01:00	Welder bevel on 13 3/8" csg & condition to install 13 3/8" x 13 5/8" x 3M casing head type slick lock.
01:00 - 02:30	Pepesa install 13 3/8" x 13 5/8" x 3M casing head type Slick lock. Perform slick lock test w/ 900 psi, by 10 min, ok.
02:30 - 10:00	N/U 13 5/8"x5M BOP, Install 13 5/8" x 3M extension, 13 5/8" x 5M drilling spool, secure bolts. N/U 13 5/8" BOP, install bell nipple chocke and kill line. Install flow line.
10:00 - 11:00	Center BOP with drilling rig, weld pads on second level. Perform operational BOP test open/close blinds rams 9 sec, pipe rams 9 sec, HCR 2 sec, annular 25/30 sec, ok.
11:00 - 15:00	Perform BOP test: pipe rams w/ all valves of manifold with 300/3000 psi x 10 min each. Pressure test annular BOP with 300/1500 psi each ok. P/T mud hose to pump & kill valve 300/3000 psi, 10 min, ok. Pick up 5" DP from

	Perla barge to platform, take serial number and measure.
15:00 - 16:00	Recover plug tester with 5" DP stand and install wear bushing.
16:00 - 18:30	Pepesa repair top drive wash pipe section. disconect 4" hose and L/D gooseneck. (change control balance hose & load with 1000 psi, calibrate graver lift).
18:30 - 21:30	Change gooseneck flange, and install gooseneck back to top drive. Install wash pipe in top drive. Perform test: upper seal face wash pipe w/ 500/3500 psi. ok.
21:30 - 00:00	M/U 57x 5" DP in stands in derrick.

January 24th, 2013

00:00 - 02:30	Continue M/U 96 jts x 5" DP in stands in derrick.
02:30 - 06:00	M/U 12" PDC bit (SMITH: JG2134, (jets 3x13, 3x14), Mud motor BH 1.5, Pony monel, 12 1/8" STB, UBHO, 2x8" Monel, X/O, 1x6 3/4" DC, X/O, 15x5" HWDP, Jar, 6x5" HWDP. RIH at 200 ft.
06:00 - 09:00	Continue TIH with dir. BHA and 12 1/4" PDC bit from 200 ft to 925 ft. TOC 925 ft.
09:00 - 10:30	Drill plugs, FC and cement from 925 to 951'.
10:30 - 11:00	Perform casing integrity test w/ 1000 psi. ok.
11:00 - 11:30	Pepesa change crew. and perform safety meeting.
11:30 - 12:00	Drill out cement from 951' to 968'.
12:00 - 12:30	Dir. drill 10 ft of formation.
12:30 - 13:00	Circulate, geology confirm formation. Displace contaminated mud with new mud 10.0 ppg.
13:00 - 13:30	Perform FIT, MW 10.0 ppg, pres 155 psi, EMW: 13.0 ppg.
13:30 - 14:00	Pepesa Rig Service.
14:00 - 14:30	Dir. drill with 12 1/4" PDC bit sliding from 978' to 1030'. WOB 10 klbs, pres 1050 psi, 550 gpm.
14:30 - 15:00	Dir. drill rotating from 1030' to 1075'. WOB 13 klbs, 650 gpm, pres 1400 psi, 65 rpm, TQ 4 kft-lb.
15:00 - 15:30	Dir. drill sliding from 1075 to 1109'. pres 1540 psi, diff pres 105 psi, 700 gpm, ROP 80 ft/hr. Survey at 1019 ft, incl 11.7 deg, azm 194 deg.
15:30 - 16:00	Dir. drill rotating from 1109' to 1171'. WOB 13 klbs, 750 gpm, pres 1850 psi, 65 rpm, TQ 4 kft-lb.
16:00 - 16:30	Ream & take survey.
16:30 - 17:00	Dir. drill rotating from 1171' to 1267'. WOB 13 klbs, 750 gpm, pres 1900 psi, 65 rpm, TQ 4.5 kft-lb.
17:00 - 17:30	Ream & take survey.
17:30 - 18:00	Dir. drill sliding from 1267 ft to 1282 ft. pres 1900 psi, diff pres 180 psi, 750 gpm, ROP 100 ft/hr. Drill rotate from 1282 ft to ft. w/750 gpm,1920 psi,65rpm,TQ 4-5 kftlb, 180 ft/hr.
18:00 - 18:30	Ream & take survey at 1304 ft, inc 18.3 deg, azm 199.5 deg
18:30 - 19:30	Dir. drill sliding from 1362 ft to 1387 ft. pres 1900 psi, diff pres 180 psi, 750 gpm, ROP 100 ft/hr. Drill rotate from 1387 ft to 1455 ft. w/750 gpm,1920 psi,65rpm,TQ 4-5 kft-lb, 180 ft/hr.
19:30 - 20:00	Ream & take survey at 1399 ft, inc 20.2 deg, azm 197.6 deg
20:00 - 21:00	Dir. drill sliding from 1455 ft to 1485 ft. pres 2000 psi, diff pres 180 psi, 750 gpm, ROP 120 ft/hr. Drill rotate from 1485 ft to 1550 ft. w/750 gpm,1980 psi,65rpm,TQ 4-5 kft-lb, 170 ft/hr.
21:00 - 22:00	Ream & take survey at 1493 ft, inc 23.1 deg, azm 196.9 deg. Pump 30 blls HVP circulate to clean the hole.
22:00 - 22:30	Dir. drill sliding from 1550 ft to 1580 ft. pres 1950 psi, diff pres 180 psi, 750 gpm,

	ROP 150 ft/hr. Drill rotate from 1580 ft to 1644 ft. w/750 gpm,1950 psi,65rpm,TQ 4-5 kft-lb, 250 ft/hr.
22:30 - 23:00	Ream & take survey at 1588 ft, inc 26.2 deg, azm 199.2 deg.
23:00 - 00:00	Drill slide 1644-1669 ft, 1738-1763 ft with 750 gpm, 1950 psi. drill rotate at 1669-1738 ft, 1764-1834 ft. with 750 gpm, 1960 psi,65rpm,TQ 4-5 kft-lb, 250 ft/hr.

January 25th, 2013

00:00 - 00:30	Ream & take survey.
00.30 - 01:00	Dir. drill sliding from 1834 ft to 1860 ft. pres 1980 psi, diff pres 190 psi, 750 gpm, ROP 100 ft/hr.
01:00 - 01:30	Dir. drill rotating from 1860' to 1930'. WOB 10/12 klbs, 750 gpm, pres 2000 psi, 65 rpm, TQ 4-5 kft-lb. Pump 30 bbls HVP.
01:30 - 02:00	Ream & take survey.
02:00 - 02:30	Dir. drill sliding from 1930 ft to 1964 ft. pres 2020 psi, diff pres 190 psi, 750 gpm, ROP 100 ft/hr.
02:30 - 03:00	Dir. drill rotating from 1964' to 2026'. WOB 10/12 klbs, 750 gpm, pres 2100 psi, 65 rpm, TQ 4-5 kft-lb.
03:00 - 03:30	Ream & take survey.
03:30 - 04:00	Dir. drill sliding from 2026 ft to 2050 ft. pres 2100 psi, diff pres 190 psi, 750 gpm, ROP 150 ft/hr. Drill rotate fr 2050 ft to 2121 ft. w/750 gpm,2150 psi,65rpm,TQ 4-5 kft-lb, 200 ft/hr.
04:00 - 04:30	Ream & take survey at 2063 ft, inc 38.1 deg, azm 194.6 deg. Pump HVP and circulate bottom up to clean the hole.
04:30 - 05:00	Dir. drill sliding from 2121 ft to 2147 ft. pres 2150 psi, diff pres 190 psi, 750 gpm, ROP 180 ft/hr. Drill rotate from 2147 ft to 2217 ft. w/750 gpm,2180 psi,65rpm,TQ 4-5 kft-lb, 250 ft/hr.
05:00 - 05:30	Ream & take survey at 2158 ft, inc 40.1 deg, azm 194.7 deg.
05:30 - 06:00	Dir. drill sliding from 2217 ft to 2247 ft. pres 2180 psi, diff pres 150 psi, 750 gpm, ROP 150 ft/hr. Drill rotate fr 2247 ft to 2292 ft. w/750 gpm,2220 psi,65rpm,TQ 4-5 kft-lb, 250 ft/hr. Last geology sample@2210 ft 100% claystone.
06:00 - 10:30	Dir. drill rotating from 2292' to 2595'. WOB 11 klbs, 67 rpm, pres 2300 psi, TQ 6/7 kft-lb. Last survey @ 2539 ft, incl 45.8 deg, azm 196.9 deg.
10:30 - 11:00	Accumulate ream and surveys.
11:00 - 12:00	Circulate, obtein last geology sample at 2595', 100% claystone. Pump vis pill. circulate bottom up, shaker clean, ok. MW: 10.2 ppg.
12:00 - 14:00	Wiper trip. from 2595 ft to shoe (966 ft). without pump. free. over pull 10 klbs.
14:00 - 14:30	Circulate bottom up, ok.
14:30 - 15:00	Pepesa rig service and clean pumps filters.
15:00 - 16:00	TIH w/ 12 1/4" PDC bit to 2595 ft. Last 2 stand with pump.
16:00 - 16:30	Circulate bottom up. Shaker show formation cuttings, continue circulating, shakers clean, ok.
16:30 - 17:00	Dir. drill sliding from 2595' to 2620'. WOB 15 klb, pres 2200 psi, diff pres 110psi.
17:00 - 17:30	Dir. drill rotating from 2620' to 2690. WOB 17 klbs, pres 2270 psi, rpm 70, gpm 750.
17:30 - 19:00	Pepesa Unit crane (model 480-H, serie 01871) out of service, crane turntable cracked. Circulate, pump vis pill, circulate bottoms up, shaker clean, ok. Halliburton condition mud to spot in hole.
19:00 - 20:00	Pump condition mud in open hole. MW: 10.3 ppg.
20:00 - 22:30	Pull out dir. BHA w/ 12 1/4" PDC bit into 13 3/8" csg shoe. (966 ft). with normal drag.

22:30 - 00:00	Pepesa organize material on 3th level. Wait on Mr. Bob barge with new crane, to Replace Pepesa crane.

January 26th, 2013

00:00 - 06:00	Continue Waiting on Mr. Bob barge with new crane, to replace Pepesa platform crane. Pepesa relocate material on third level of platform.
06:00 - 12:00	Mr. Bob barge on the way to platform LO6. Bring new crane. Pepesa personal continue preparing platform crane to replace it.
12:00 - 15:00	Tugboat Golf Scout arrived to location and bring Mr Bob barge. Tugboat lifting Perla barge anchors, prior to position Mr. Bob barge next to platform.
15:00 - 18:30	Tugboat lift 2 anchors to Perla barge and position to west direction.
18:30 - 20:30	Tugboat bring Mr. Bob barge next to platform, and position anchors.
20:30 - 00:00	Mr Bob barge wait on daylight next to platform to aproach at platform and replace platform crane.

January 27th, 2013

00:00 - 05:30	Mr Bob barge wait on daylight next to platform to aproach at platform and replace platform crane.
05:30 - 06:00	Mr Bob barge aproach to west side of platform to replace platform crane.
06:00 - 08:00	IMI personnel perform maneuver and Rig down Pepesa Unit crane. and rig up Savia LB 043 crane to platform LO6.
08:00 - 08:30	Tugboat Golf Scout problems w/ winch, return to talara, no possible to move Mr. Bob barge from west side of platform. Pepesa change crew with production boat f/ Platform to Perla barge.
08:30 - 13:00	Mr. Bob wait on tugboat. Pepesa crew move and position Savia crane on 3th level of platform to north west side.
13:00 - 15:00	Arrived to location Tere tugboat, lifting Mr. Bob anchors and separate from platform. Pepesa continue moving and positioning Savia crane.
15:00 - 19:00	Pepesa finish to position crane on northwest side, and start to weld supports and pads. Tere tugboat position Perla barge next to platform.
19:00 - 00:00	Pepesa connect mud lines, diesel ,water, air & electric lines from platform to perla barge. installa woods around platform crane, condition and relocate materials on third level of platform. Continue welding supports and pads on Link Belt # 043 Savia platform crane.

January 28th, 2013

00:00 - 00:30	Connect electric cables, Passon sensors to pumps. Pepesa welders finish welding supports and pads on platform crane (link belt-043).
00:30 - 01:00	Circulate at shoe bottom up to condition mud 300-600 gpm, 1500 psi.
01:00 - 02:00	RIH from shoe 968 ft to 1830 ft. without problems.
02:00 - 02:30	At 1830 ft. Circulate bottoms up to condition mud, ok. Piser sac personnel inspect welding on platform crane.
02:30 - 03:30	Continue RIH from 1830 ft to bottom (2690 ft). set at 2480 ft wash down to bottom.
03:30 - 04:00	Circulate bottoms up with 750 gpm, 2300 psi.
04:00 - 05:00	Dir. drill rotate from 2690 fr to 2785 ft with 750 gpm, 2500 psi,65 rpm, 5/6 k ft-lb TQ, 10 Klb WOB. 120 ft/hr ROP.
05:00 - 05:30	Ream & take survey at 2729, inc 47.3 deg, azm 195 deg. Piser sac personnel Finished inspect welding on platform crane. ok.
05:30 - 08:30	Dir. drill rotate from 2785 fr to 3070 ft with 750 gpm, 2550 psi,65 rpm, 5/6 k ft-lb

	TQ, 10 Klb WOB. 150 ft/hr ROP. Last geology sample at 2780 ft: 90% Clyst, 10% Sltst.
08:30 - 09:30	Pump vis pill, circulate, return a lot encapsulated Clay, plug possum belly. Pepesa clean shakers.
09:30 - 12:00	Dir. drill rotating from 3070' to 3260'. WOB 16 klbs, 67 rpm, TQ 7/8 kft-lb, pres 2650 psi, 700 gpm. Survey @ 3201', incl 46 deg, azm 194.1 deg., Geology sample @ 3170', FM Talara, 70% claystone, 20% siltstone, 10% dolomite.
12:00 - 15:30	Dir. drill rotating from 3260' to 3614'. WOB 17 klbsm 71 rpm, TQ 7/8 kft-lb, pres 2760 psi, 725 gpm. Vessel Sofia Christine bring 9 5/8" casing to location. Pepesa measure 9 5/8" casing.
15:30 - 18:00	Geology Department stop section TD @ 3614', FM. Rio Bravo. Survey 3558', inc 47.30 deg, azm 193.50 deg. Circulate, pump vis pill, condition mud, MW: 10.4 ppg, shakers clean ok.
18:00 - 19:00	Pull out 4 stands to 3254', perform flow check, 10 min, ok.
19:00 - 21:30	Continue pull out dir. BHA w/ 12 1/4" PDC bit from 3254' to 966' shoe. free, without pump, fill hole every 5 stands. circulate at shoe.
21:30 - 23:30	RIH from shoe to bottom (3614 ft). wash down last stand. RIH without problems.
23:30 - 00:00	Circulate bottom up. with 750 gpm,2500 psi.

January 29th, 2013

00:00 - 01:00	Circulate, pump high vis pill and continue circulate to shaker clean. 760 gpm,2670 gpm.
01:00 - 02:00	Pull out 4 stands to 3250', perform flow check, 10 min, ok.
02:00 - 07:30	Continue pull out dir. BHA w/ 12 1/4" PDC bit from 3250' to 40 ft. free, with normal drag. L/D 12 1/4" bit, mud motor, STB, UBHO, bit 12 1/4".
07:30 - 08:00	Pepesa perform rig service.
08:00 - 10:00	Recover wear bushing. Cia. Frank rip up power units and connect hydraulic tongs, elevator and fill up tool.
10:00 - 10:30	Perform safety meeting with Frank and Pepesa crew.
10:30 - 11:30	Run 9 5/8" casing (N-80, BTC, 43.5 lb/ft) run shoe, 2 joint and float valve.
11:30 - 12:30	Frank personnel, reposition elevator tool and hydraulic tongs.
12:30 - 17:00	Continue TIH 9 5/8" casing from 113 ft to 2400 ft.
17:00 - 17:30	Circulate bottom up, pres 286 psi, gpm 250. ok.
17:30 - 20:00	Continue TIH 9 5/8" casing, N-80, 43.5 lb/ft, BTC, from 2400' to 3614'. 97 jtsx9 5/8" csg.
20:00 - 22:30	Cement vessel Medomack arrived to location at 20:00hrs. Halliburton personnel rig up cement lines. Circulate casing 9 5/8" w/ fill up tool with 300 gpm, pres 415 psi.
22:30 - 23:30	Cia Frank's R/D spider & fill up tool, install conventional elevator. and Halliburton cement head.
23:30 - 00:00	Circulate w/ 350 gpm,290 psi.

January 30th, 2013

00:00 - 00:30	Perform safety meeting with Halliburton, Savia and Pepesa crew.
00:30 - 03:30	Halliburton fill cmt lines with fresh water and test lines w/ 2500 psi. drop bottom plug. pump 20 bbls 8.4 ppg mud flush w/ 5 bpm. Pump 30 bbls ,11.5 ppg tuned spacer w/ 5 bpm. Start mix lead slury Econocem I 13,5 ppg (640sx), Pump lead slurry 189

	bbls,5bpm,360 psi. Pump tail cement Halcem I :45 bbls, 15.2 ppg, 3 bpm, 240 psi, (240 sx). Drop top plug, displacement with 263 bbls mud 10.4 ppg (same as the theoric calculated) .7/2 bpm 440/560 psi. Return to surface mud flush,11.5 ppg & tuned spacer contamined 11.6 ppg. Bump plug with 560 psi and overpressure to 1100 psi. Perform back flow test 2bbls, ok. used 867 sk of cement Pacasmayo.FS:3614 ft. FC 3535 ft.
03:30 - 04:00	WOC, Halliburton open cement head and discharge.R/D cementing lines and Pepesa crew L/D flowline, kill line, HCR and clean BOP, clean tanks and shakers.
04:00 - 05:00	Lift 13 5/8" BOP w/raiser, center 9 5/8" csg, set slips 145 klbs. Cut and L/D belt Nipple.
05:00 - 06:00	L/D spider and elevators, Cut and retrieve 9 5/8" csg landing joint on first level.
06:00 - 10:00	WOC. Cut and bevel 9 5/8" csg on first level. Install casing spool 13 5/8 x 3M - 11 x3M, tight bolts and perform test w/1500psi by 10 min, ok. Install double flange drill extension 13 5/8x3M ; 11x3M. Received visit from Savia Personnel and Peru-Petro to Perla barge, LO6 platform and rig 40.
10:00 - 15:00	Install 13 5/8" x 5M drilling spool, BOP stack and tighten bolts. Connect chokline and kill lines from drilling spool to manifold. Install bell nipple and flow line. Center 13 5/8" BOP and weld pads. Test BOP operativity, 8sec pipe rams, 9sec blind rams, 2 sec HCR and 25sec annular, open/ close, ok. Sofia Christine vessel arrived to location, bring Phoenix directional tools, and received Franks power units, running tool, Savia 12 1/4" tools, 12 1/4" dir. tool, from platform to Sofia Christine.
15:00 - 20:00	Install 9 5/8" plug tester. Perform BOP test. Pipe rams, 500 & 3000 psi, by 10 min, ok. Annular w/ 300 & 1500 psi, by 10 min, ok. Pepesa P/U 5"DP from barge to platform. Remove 5" DP and continue BOP test: Blind ram w/ 300 & 3000 psi, by 10 min, ok. Blind ram w/ external, medium, internal of manifold w/ 300 & 3000 psi, by 10 min, ok. Test TDS, ok.
20:00 - 21:00	P/U stand and retrieve plug tester. M/U & install wear bushing secure stops, ok. Continue receiving consumo water from Sofia Christine vessel. Move 5" PD take serial number and measure.
21:00 - 00:00	Continue Upload from Perla barge to platform 5" DP,Phoenix tools. (mud motor, jars, monels). take serial number and measure . M/U 5" DP in stand in derrick.

January 31st, 2013

00:00 - 05:00	Continue M/U 48 jts x 5" DP in stand in derrick & Continue upload from barge to platform, take series and measure.
05:00 - 09:00	M/U dir. BHA w/ 8 1/2" PDC bit MSH516M, jet 5x13, mud motor BH 1.5 deg, 6 3/4" pony monel, 8" stabilizer, 6 3/4" UBHO, 6 3/4" pony monel (2), cross over, 6 1/2" DC, cross over, 5" HWDP 18", jar, 5" WHDP (6). BHA depth: 897.86 ft.
09:00 - 17:30	Continue TIH dir BHA and 8 1/2" PDC bit with 5" DP joint per joint from 897 ft to 3270 ft. L/D 8" stand DC and send to Perla barge.
17:30 - 18:00	Continue TIH with pump last 3 stands, from 3270' to 3540'. (TOC 3540 ft).
18:00 - 19:30	Drill out cement from 3540 ft to 3599'.
19:30 - 20:00	Perform casing test, increase pressure to 860 psi, drop gradually to cero. Retest, increase pressure gradually to 650 psi, hold pressure.
20:00 - 20:30	Continue drilling out cement from 3599' to 3614'. WOB: 4/5 klbs, 400 gpm, 45 rpm.

20:30 - 21:00	Dir. drill w/ BHA and 12 1/4" PDC bit from 3614' to 3625'. WOB: 8 klbs, 390 gpm, 50 rpm.
21:00 - 22:00	Circulate, obtein last geology sample, confirm formation. Displace contaminated mud for new mud.
22:00 - 22:30	Perform formation integrity test FIT, increase pressure gradually, MW 10.4 ppg, pres 650 psi, EMW: 14.5 ppg.
22:30 - 00:00	Dir. Drill rotate from 3625 ft to 3738 ft. with 450 gpm,1400 psi,50rpm,5 k ft-lb TQ. 100 ft/hr ROP.

February 01st, 2013

00:00 - 00:30	Ream and take survey at 3670 ft. inc 47.3 deg , azm 193.1 deg.
00:30 - 01:00	Dir. Drill slide from 3738 ft to 3750 ft with 540 gpm, 1900 psi,20 klb WOB.
01:00 - 01:30	Dir. Drill rotate from 3750 ft to 3833 ft. with 540 gpm,2000 psi, 65 rpm, 10/12 Klb WOB, 6 k ft-lb TQ. 100 ft/hr ROP.
01:30 - 02:00	Ream and take survey at 3763 ft. inc 47.7 deg , azm 193.2 deg.
02:00 - 02:30	Dir. Drill slide from 3833 ft to 3851 ft with 500 gpm, 1870 psi,20 klb WOB.
02:30 - 03:00	Dir. Drill rotate from 3851 ft to 3926 ft. with 520 gpm, 1930 psi, 60 rpm, 10/12 Klb WOB, 6 k ft-lb TQ. 120 ft/hr ROP.
03:00 - 03:30	Ream and take survey at 3858 ft. inc 47.5 deg , azm 194.1 deg.
03:30 - 05:00	Dir. Drill rotate from 3926 ft to 4023 ft. with 500 gpm, 1930 psi, 60 rpm, 10/12 Klb WOB, 6 k ft-lb TQ. 80 ft/hr ROP.
05:00 - 05:30	Ream and take survey at 3953 ft. inc 47.2 deg , azm 194.1 deg.
05:30 - 06:00	Dir. Drill slide from 4023 ft to 4032 ft with 530 gpm, 1970 psi,20 klb WOB. Last geology sample at 4010': 30% clayst,40% sdst,20% sd,10% sst.
06:00 - 06:30	Dir. drill rotating from 4032 ft to 4055 ft.. at 4055 while drilling, Lost rotation, continue circulating, and work string up/down.
06:30 - 07:00	Stuck pipe. Continue working string up/down, reduce mud weight from 10.5 ppg to 10.2 ppg. While circulating lost 100 bbls of mud.
07:00 - 08:00	Recover rotation, pull out string from 4055' to 4019'. circulate.
08:00 - 09:30	Pull out 5 stands from 4019' to 3607'. circulate while condition mud.
09:30 - 11:30	Circulate at shoe while condition mud w/ calcium carbonate.
11:30 - 12:30	TIH from 4019' to 4055'. with circulation and rotation. Working up/down. ok. MW: 10.2 ppg.
12:30 - 13:30	Dir. drill rotating w/ BHA and 8 1/2" PDC bit from 4055' to 4117'. Drill w/ controlate parameters, WOB 11 klbs, 410 gpm, 75 rpm, pres 1300 psi. avg ROP 62 ft/hr.
13:30 - 14:00	Ream and circulate. Take survey @ 4048', incl 46.1 deg, azm 193.8 deg. Geology sample @ 4100', 30% claystone, 40% sandstone, 10% siltstone, 20% sand.
14:00 - 16:00	Dir. drill rotating from 4117' to 4200'. WOB 11 klbs, pres 1280 psi, 400 gpm, 70 rpm, TQ 6/7 kft-lb.
16:00 - 16:30	Dir. drill sliding from 4224' to 4244'. WOB 24 klbs, pres 1265 psi, dif pres 140 psi, 400 gpm.
16:30 - 21:00	Reduce MW from 10.2 ppg to 10.1 ppg. Dir. drill rotating from 4244' to 4495 WOB 13 klbs, pres 1530 psi, 390 gpm, TQ 6/7 kft-lb, 70 rpm. Lost 200 bbls mud while drilling.
21:00 - 22:00	Circulate with low caudal 250 gpm, move string up/down, Halliburton personnel prepare LCM pill. Geology sample @ 4495', 70% sand, 20% sanstone, 10% claystone.
22:00 - 23:30	Pump 70 bbls of LCM pill, circulate bottoms up. Continue circulate gradually 350-400-430 gpm. while increase flow rate lost 7 bbls in 1 hour. flow check ok.
23:30 - 00:00	Pull out from bottom 4495 to 4200 ft. without circulation.

February 02nd, 2013

00:00 - 01:30	Continue Pull out from 4200 ft to shoe 3614 ft witout problems. flow check (in 15 min lost 1 bbl). wait on shoe while Halliburton Prepare 400 bbls of drilling mud.
01:30 - 03:00	Halliburton prepare & condition 400 bbls x 10.1ppg of drilling mud. At shoe perfor flow check , lost 12 bbls in 1.5 hour.
03:00 - 04:30	RIH from shoe 3614ft to bottom. last 4 stand run with pump and rotation.
04:30 - 06:00	Circulate with 300-400 gpm, observe shaker and pits. circulating without losses mud. Start drilling 8 1/2" hole.
06:00 - 13:30	Dir. drill rotating w/ 8 1/2" PDC bit f/ 4495' to 4792'. WOB 13 klbs, 400 gpm. TQ 6/7 klb-ft. Pres 1200 psi, 60 rpm.
13.30 - 14:00	Dir. drill sliding f/ 4792' to 4812'. WOB 26 klbs, 420 gpm, pres 1420 psi.
14:00 - 15:00	Dir. drill rotating f/ 4812' to 4877'. WOB 12 klbs, pres 1450 psi, gpm 430 gpm, TQ 6/7 kft-lb, 65 rpm.
15:00 - 19:00	Dir. drill rotating f/ 4877' to 5076'. WOB 13 klbs, pres 1350 psi, 420 gpm, 70 rpm. Increase MW from 10.1 ppg to 10.3 ppg.
19:00 - 20:00	Dir. drill sliding f/ 5076' to 5101'. WOB 24 klbs, 430 gpm, pres 1420 psi.
20:00 - 22:00	Dir. drill rotating f/ 5101' to 5180'. WOB 13 klbs, press 1620 psi, 450 gpm, 65 rpm.
22:00 - 22:30	Dir. drill sliding f/ 5180' to 5187'. WOB 26 klbs, 440 gpm, pres 1550 psi.
22:30 - 23:00	Dir. drill rotating f/ 5187' to 5240'. WOB 10/12 klbs, press 1450 psi, 420 gpm, 60 rpm. Pump HVP to clean the hole.
23:00 - 00:00	Accumulate ream & take surveys.

February 03rd, 2013

00:00 - 00:30	Dir. drill rotating f/ 5240' to 5256'. WOB 12 klbs, press 1400 psi, 420/400 gpm, 60 rpm. while drilling Lost 40 bbls of drilling mud . low flow rate and circulate.
00:30 - 02:30	Continue circulate, Pump 30 bbls LCM pill and circulate bottom up. while circulate Lost 100 bbls of drilling mud. low flow rate to 220 gpm. Reduce MW from 10.3 ppg to 10.2 ppg.
02:30 - 03:30	While circulate, Prepare and Pump 70 bbls LCM pill and Spot on bottom.
03:30 - 04:30	POOH 3 stands, from bottom 5256 ft to 4950 ft. Perform flow check by10 min: Lost 2.5 bbls.
04:30 - 06:00	POOH from 4950 ft to 4170 ft. with pump and circulation. over pull 40 klb.
06:00 - 10:30	Continue Pull out dir. BHA w/ 8 1/2" PDC bit from 4170' to 250'.
10:30 - 12:00	Pepesa cut off 100 ft and slip 1 1/4" drilling line.
12:00 - 13:30	Continue POOH dir BHA from 250' to surface. L/D stabilizer and MWD.
13:30 - 15:00	TIH BHA 8 1/2" PDC bit without mud motor and MWD, from surface to 500'.
15:00 - 15:30	Pepesa rig service.
15:30 - 20:00	Continue TIH BHA 8 1/2" PDC, from 500' to 5256'. Last 4 stands with pump, 250 gpm. ok.
20:00 - 20:30	Pump and displace 80 bbls LCM 80 lb/bbls. Spot on bottom.
20:30 - 22:00	Pull out from 5256' to 4100'. with out pump, free.
22:00 - 23:00	TIH w/ 8 1/2" PDC to bottom 5256'. without problems.
23:00 - 00:00	Drill rotate with conventional BHA & 8 1/2" PDC bit from 5256 ft to 5290 ft with 370 gpm, 690 psi,70 rpm,7 k ft-lb TQ, 10 Klb WOB.

February 04th, 2013

00:00 - 01:00	Cont. Drill rotate with conventional BHA & 8 1/2" PDC bit from 5290 ft to 5323 ft with 370 gpm, 690 psi,70 rpm,7 k ft-lb TQ, 10 Klb WOB.

01:00 - 01:30	Ream stand.
01:30 - 04:30	Drill rotate from 5323 ft to 5419 ft with 370 gpm, 790 psi,70 rpm,7 k ft-lb TQ, 10 Klb WOB. 32 ft/hr ROP. MW: 10.3ppg.
04:30 - 05:00	Ream stand.
05:00 - 06:00	Drill rotate from 5419 ft to 5467 ft with 370 gpm, 795 psi,70 rpm,7-8 k ft-lb TQ, 10 Klb WOB. 40 ft/hr ROP.MW: 10.3 ppg.
06:00 - 12:00	Drill rotating from 5467' to 5648'. Increase MW gradually from 10.3 ppg to 10.5 ppg. WOB 14klbs, pres 1000 psi, 400 gpm, 70 rpm, TQ 7/8 kft-lb.
12:00 - 17:00	Drill rotating from 5648' to 5798'. Increase MW from 10.5 to 10.7 ppg. WOB 14/15 klbs, pres 1030 psi, 430 gpm, TQ 7/8 kft-lb.
17:00 - 17:30	circulate, obtained last geology sample @ 5798', 40% claystone, 30% siltstone, 20% sandstone, 10% Sand.
17:30 - 18:30	Pump vis pill, circulate, shaker clean, ok.
18:30 - 19:00	Pull out 4 stands to 5434', perform flow check, 10 min, no flow, ok.
19:00 - 00:00	Continue POOH 8 1/2" PDC bit from 5434' to 150 ft. Without drag. Fill hole every 5 stands.

February 05th, 2013

00:00 - 01:00	Cont. L/D BHA: 2x6 1/2" DC , 8" STB and 8 1/2 pdc bit.
01:00 - 03:30	M/U dir. BHA w/ 8 1/2" PDC bit MSF516M, jet :7x12, mud motor BH 1.5 deg, 6 3/4" pony monel, 8" stabilizer, 6 3/4" UBHO, 6 3/4" pony monel (2), cross over, 6 1/2" DC, cross over, 5" HWDP 18", Jar, 5" WHDP (6). BHA depth: 888.74 ft. Test MWD with 300 gpm, 420 psi.
03:30 - 07:30	Continue RIH dir BHA with 5" DP from 888 ft to 5261 ft.
07:30 - 13:00	TIH from 5261' to 5798'. At rate of 2.5 ft/min to log Gamma Ray. Survey at 5758', inc 47.2 deg, azm 194.5 deg.
13:00 - 15:00	Dir. drill rotating w/ 8 1/2" PDC bit from 5789' to 5913'. WOB 14 klbs, 410 gpm, pres 1500 psi, 60 rpm, TQ 7 kft-lb. avg ROP 62 ft/hr. Geology sample FM Palegreda @ 5870', 50% claystone, 30% siltstone.
15:00 - 15:30	Ream & take survey.
15:30 - 16:00	Directional drill rotate from 5913 ft to 5924 ft. with WOB 14 klbs, 400 gpm, pres 1400 psi, 60 rpm, TQ 7 kft-lb.
16:00 - 17:00	Drill slide from 5924 ft to 5944 ft with 400 gpm,1380 psi,20/25 klb WOB.
17:00 - 18:30	Directional drill rotate from 5944 ft to 6018 ft. with WOB 15 klbs, 400 gpm, pres 1440 psi, 60 rpm, TQ 8 kft-lb.
18:30 - 19:00	Ream & take survey.
19:00 - 20:00	Drill slide from 6018 ft to 6038 ft with 400 gpm,1380 psi,20/25 klb WOB.
20:00 - 21:30	Directional drill rotate from 6038 ft to 6112 ft. with WOB 15 klbs, 400 gpm, pres 1450 psi, 60 rpm, TQ 8 kft-lb.
21:30 - 22:00	Ream & take survey.
22:00 - 23:00	Drill slide from 6112 ft to 6131 ft with 400 gpm,1340 psi,20/25 klb WOB.
23:00 - 00:00	Directional drill rotate from 6131 ft to 6196 ft. with WOB 15 klbs, 400 gpm, pres 1430 psi, 60 rpm, TQ 8 kft-lb.

February 06th, 2013

00:00 - 00:30	Ream and take survey.
00.30 - 02:00	Directional drill rotate from 6196 ft to 6207 ft. Cont. Drill slide from 6207 ft to 6227 ft with 400 gpm,1330 psi,20/25 klb WOB.
02:00 - 03:30	Directional drill rotate from 6227 ft to 6303 ft with 400 gpm,1460 psi, 15/20 klb WOB. 60 rpm, 8/9 k ft-lb TQ. 60 ft/hr ROP.
03:30 - 04:00	Ream and take survey.

04:00 - 08:00	Drill rotating from 6303 ft to 6397 ft with 400 gpm,1350 psi,15 klb WOB.
08:00 - 10:30	Dir. drill sliding from 6397' to 6427'. WOB 10 klbs, pres 1350 psi, 400 gpm.
10:30 - 11:00	Accumulate ream and circulate.
11:00 - 12:00	Dir. drill rotating from 6427' to 6493'. WOB 13 klbs, pres 1890 psi, 460 gpm, 69 rpm.
12:00 - 12:30	Geology sample @ 6480', 10% sandstone, 20% siltstone, 60 Sand, 10 sandstone. Formation show 2,000 gas unit, circulate, gas drop to cero. condition mud weight 10.8 ppg.
12:30 - 15:00	Dir. drill sliding from 6493' to 6520'. WBO 10 klbs, pres 1300 psi, 400 gpm, diff press 50/60 psi.
15:00 - 17:00	Dir. drill rotating from 6520' to 6588'. WOB 17 klbs, pres 1550 psi, 400 gpm, TQ 8/9 kft-lb, 61 rpm.
17:00 - 19:00	Gas show 8000 units, circulate. MW drop from 10.8ppg to 10.4ppg. Condition mud to 10.9+ ppg. gas drop to 25 units.
19:00 - 21:30	Dir. drill sliding from 6588' to 6610'. 10 klb wob, 400 gpm, 1360 psi.MW: 11 ppg.
21:30 - 23:00	Dir. drill rotating from 6610' to 6667'. WOB 15/17 klbs, pres 1580 psi, 410 gpm, TQ 8/9 kft-lb, 63 rpm.
23:00 - 23:30	Ream & take survey.
23:30 - 00:00	Dir. drill rotating from 6667' to 6693'. WOB 15/17 klbs, pres 1600 psi, 410 gpm, TQ 8/9 kft-lb, 63 rpm.

February 07th, 2013

00:00 - 01:30	Dir. drill rotating from 6693' to 6776'. WOB 15/17 klbs, pres 1600 psi, 410 gpm, TQ 8/9 kft-lb, 63 rpm.
01:30 - 02:00	Ream & take survey.
02:00 - 04:30	Dir. drill slide from 6776 ft to 6805 with 410 gpm, 1500 psi. 10 klb wob.
04:30 - 05:30	Dir. drill rotating from 6805' to 6859'. WOB 15/17 klbs, pres 1600 psi, 410 gpm, TQ 8/9 kft-lb, 60 rpm.
05:30 - 06:00	Ream & take survey.
06:00 - 08:00	Accumulate dir. drill sliding from 6859' to 6884'. WOB 54.8 klbs, pres 1533 psi, 410 gpm.
08:00 - 14:30	Accumulate dir. drill rotating from 6884' to 7143'. WOB 19 klbs, pres 1900 psi, 450 gpm, 60 rpm, TQ 9/10 kft-lb.
14:30 - 15:00	Accumulate survey and ream. Last geology sample @ 7130', 30% siltstone, 30% sandstone, 20% Sand, 20% claystone. Last Survey @ 7081', 48.7 inc, 194.1 azm.
15:00 - 18:00	Accumulate dir. drill sliding from 7143' to 7179'. WOB 30 klbs, pres 1825 psi, 450 gpm.
18:00 - 22:00	Accumulate dir. drill rotating from 7179' to 7426'. WOB 16 klbs, pres 2030 psi, 440 gpm, 65 rpm, TQ 10kft-lb.
22:00 - 22:30	Accumulate surveys and ream. Last survey @ 7368', inc 48.1 deg, 194.4 deg.
22:30 - 23:00	Circulate, to obtain geology sample @ 7426' 30% claystone, 40% sandstone, 30% Sand.
23:00 - 00:00	Pump vis pill, to clean annular, circulate, shaker clean, ok.

February 08th, 2013

00:00 - 01:30	Dir. drill rotating from 7426' to 7521'. WOB 17 klbs, pres 2075 psi, 440 gpm, 65 rpm, TQ 10 kft-lb.
01:30 - 02:00	Circulate and obtain geology sample at 7520', FM Mogollón, 50% sandstone, 30% claystone, 20% Sand. Last survey @ 7462', inc 48.1 deg, azm 193.6 deg.
02:00 - 04:00	Perform a short trip to calibrate from 7521' to 5700'. Tight and ream up/down.

04:00 - 05:30	Trip back to bottom from 5700' to 7521'. free.
05:30 - 06:00	Circulate bottoms up, Gas 2900 units, drop to 50 units. Prepare connection to continue drilling w/ 8 1/2" PDC bit.
06:00 - 14:00	Dir. drill rotating from 7521' to 7805'. WOB 17 klbs, 450 gpm, pres 1950 psi, 65 rpm, TQ 10 kft-lb. Geology sample 7780', 70% claystone, 10% siltstone, 10% sandstone, 10% Sand.
14:00 - 14:30	Accumulate surveys and ream.
14:30 - 16:30	Dir. drill sliding from 7805 to 7835'. WOB 30 klbs, pres 1770 psi, 440 gpm.
16:30 - 18:00	Dir. drill rotating from 7835' to 7912'. WOB 17 klbs, pres 1900 psi, 450 gpm, 65 rpm, TQ 10 kft-lb. Survey @ 7841', inc 47.6 deg, azm 194.6 deg. Lost mud while drilling.
18:00 - 20:30	Dir. drill sliding from 7912' to 7931'. WOB 20 klbs, pres 1890 psi.
20:30 - 00:00	Dir. drill rotating from 7912' to 8041', WOB 17 klbs, 450 gpm, pres 2030 psi, TQ 11 kft-lb. (Lost mud while drilling). Last survey @ 7936', inc 47.4 deg, azm 194.7 deg. Geology sample @ 7950', 50% claystone, 40% siltstone, 10% sandstone.

February 09th, 2013

00:00 - 01:30	Dir. drill rotating from 8041' to 8114'. WOB 17 klbs, pres 2030 psi, 450 gpm, 60 rpm, TQ 11 kft-lb. Last Survey @ 8031' incl 47.9 deg, azm 194.7 deg.
01:30 - 02:30	Circulate to obtain geology sample at 8114', 50% sand, 40%, sandstone, 10% claystone.
02:30 - 03:30	Pump vis pill, circulate, shakers clean, ok.
03:30 - 04:00	Pull out 4 stand from 8114' to 7750', perform flow check, ok.
04:00 - 06:00	Continue Pull out dir. BHA w/ 8 1/2" PDC bit from 7750' to 5665'. Fill hole every 5 stands. Work up/down 6 first stands. Continue pull out free.
06:00 - 13:00	Continue Pull out from 5665 ft to surface. L/D directional tools, mud motor, monel, stabilizer, bit.
13:00 - 16:00	TIH Slick BHA with 8 1/2" tricone bit to 3600 ft.
16:00 - 18:00	Circulate, show gas 4900 units, increase MW from 11.1 ppg to 11.2 ppg. Gas drop to 50 units.
18:00 - 20:00	Continue TIH from 3600' to 5500'. Circulate, gas 900 units.
20:00 - 22:00	Continue TIH from 5500' to 8114'. Last 3 stands with pump.
22:00 - 00:00	Circulate at bottom, show gas 1600 units, drop to 600 units. Continue circulating and condition mud weight to 11.2 ppg.

February 10th, 2013

00:00 - 06:00	Perform flow check, well stable, ok. Pull out Slick BHA w/ 8 1/2" tricone bit from 8114' to 500'. fill hole every 5 stands. SLB units arrived to location, Rig up units on platform.
06:00 - 07:00	Continue POOH Slick BHA with 8 1/2" tricone bit to surface.
07:00 - 08:30	Pepesa L/D bell nipple and flow line.
08:30 - 10:00	Schlumberger receive well, Pepesa and SLB install 13 5/8" flange on top of BOP and tight bolts 10 bolts, install lubricator bumper sub.
10:00 - 10:30	Perform safety meeting with Schlumberger and Pepesa crew. Fill hole w/ 23 bbls.
10:30 - 12:00	Schlumberger and Pepesa continue tighting rest of bolts (6) on flange, and make connections on lubricator.
12:00 - 13:30	Perform bumper sub pressure test with 500 psi, SLB tool hold 300 psi. Prepare logging tools to install inside well. Fill hole with 10 bbls.

13:30 - 15:30	Disconect bumper sub to install inside well logging tool (DDL-GR-DEN-NEUTRON-CALIPER).
15:30 - 16:30	SLB power units fail, Pepesa and Schlumberger personnel repair it. fill hole with 11 bbls.
16:30 - 17:00	Connect bumper sub. to flange. Logging tool inside well.
17:00 - 19:00	TIH Logging tool from surface to 7990'. restriction at 7992'. Fill hole with 10 bbls.
19:00 - 20.30	Start to log. from 7992' to shoe 3614'. Tension with 6000 lbs at 7950', and 6100 lbs at 7850'. (over pull 2200 lbs).
20:30 - 21:00	Repeat section from 3900' to 3614'. Fill hole with 10 bbls.
21:00 - 22:30	Continue pull out Schlumberger logging tool to surface.
22:30 - 00:00	Rig down SLB logging tool.

February 11th, 2013

00:00 - 01:00	Continue rig down SLB tools (flange 13 5/8").
01:00 - 02:30	Pepesa install bell nipple and flow line.
02:30 - 06:00	M/U and THI slick BHA w/ 8 1/2" tricone bit from surface to 3600 ft. shoe.
06:00 - 06:30	Circulate bottom up. Gas 1600 units.
06:30 - 08:00	TIH slick BHA w/ 8 1/2" tricone bit from 3600' to 5600'.
08:00 - 09:00	Circulate bottom up, show gas 5000 units, drop to 100 units.
09:00 - 11:00	Continue TIH from 5600' to 8114'. Last 3 stands with pump.
11:00 - 13:00	Circulate bottoms up, show gas 4400 units. Mud weight drop to 10.9 ppg. Increase MW and condition mud to 11.2 ppg. Gas drop to 50 units.
13:00 - 20:30	Pull out slick BHA w/ 8 1/2" tricone bit from 8114' to surface.
20:30 - 21:00	Perform safety meeting.
21:00 - 22:00	SLB prepare pressure tool.
22:00 - 23:00	TIH SLB pressure tool to 3500', test tool inside casing, ok. Continue TIH to 5500'.
23:00 - 00:00	Start to record pressure points. 5015' tool no seal, 4861' tool no seal, at 4830' tool no seal, at 4737' tool no seal, at 4626' seal and dry point.

February 12th, 2013

00:00 - 01:30	Continue SLB pressure points. At 4543' tool no seal, at 4542.5' no stabilized pres, at 4627' no stabilized pres, 4519' tool no seal, 4518' tool no seal, 4180' no seal, 4181' no seal, 3920' no seal, 3921' no stabilized pres, 3822' no stabilized pres.
01:30 - 02:00	Pull out tool inside casing, perform SLB tool test inside casing, ok.
02:00 - 03:00	Continue pull out SLB pressure tool to surface.
03:00 - 04:30	L/D SLB pressure tool, SLB personnel work data and Rig down.
04:30 - 06:00	position SLB units, cabin and basket to east side of platform. Pepesa pick up stand and retrieve wear bushing. Change 7" pipe ramps in 13 5/8" BOP.
06:00 - 10.00	Organize SLB units on platform prior to Rig up IST tools. Savia mechanical change 600 ft, 7/8" crane cable.
10:00 - 13:30	Rig up IST tools (power units, tongs, fill up tools). Install tongs on rotary table and fill up tool. Moved SLB tools to Perla barge.
13:30 - 14:00	Perform safety meeting with ITS and Pepesa crew.
14:00 - 15:00	TIH 7" casing (N-80, BTC, 26 lb/ft). Run 1 joint with shoe, 2 joint shoe track and 1 joint with float valve.
15:00 - 21:00	Run 7" casing from 117' to 3000'.
21:00 - 21:30	Circulate bottom up, show gas 500 units. drop to 100 units.
21:30 - 00:00	Continue running 7" casing (N-80, BTC, 26 lb/ft) from 3000' to 4609'.

February 13th, 2013

00:00 - 06:00	Continue running 7 casing (N-80, BTC, 26 lb/ft) from 4609' to 6919'. Tight points work up/down at 6200', 6400', 6800'.
06:00 - 12:00	Continue running 7" casing (N-80, BTC, 26 lb/ft) from 6919' to 7735'. Work casing up/down with restriction.
12:00 - 13:30	Cia. ITS fail fill up tool and fail slips. Medomack cement vessel positon next to platform, rig up cement lines.
13:30 - 14:00	Continue running 7" casing from 7735' to 7921'. Work casing up/down with restriction. 7" casing tag at 7921 ft.
14:00 - 16:30	Cia. ITS mechanical elevator no open, L/D fill up tool, cut one casing joint to L/D mechanical elevator, prior to replace casing joint with conventional elevator.
16:30 - 17:30	Pick up 7" casing joint to replace previus cut casing. No possible to continue running 7" casing, tag at 7921'. Install Savia circulation head.
17:30 - 18:00	Circulate bottom up, gas 200 units, drop to cero. Lost 8 bbls in 20 min.
18:00 - 18:30	Install Halliburton cement head w/ manifold. Perform safety meeting with all personnel on location.
18:30 - 21:30	Test cement lines w/ 3500 psi. Pump 50 bbls mud 11.2 ppg w/ low reology, 40 bbls Tuned Spacer 12.0 ppg, 10 bbls Super flush 8.6 ppg, 8 bbls fresh water 8.4 ppg. Drop bottom plug, pump 127 bbls cement Halcem 13.2 ppg, 84 bbls cement Gas Stop 15.2 ppg. Drop top plug. Displace w/ 302 bbls mud 11.2 ppg. Lost circulation 27 bbls total. Arrived pressure 950 psi, increase to 1500 psi. Back flow 2 bbls. Casing shoe: 7921', float collar: 7842'.
21:30 - 00:00	WOC while Halliburton L/D cement lines and Pepesa untight riser bolts. L/D flowline, lift 13 5/8" BOP stack.

February 14th, 2013

00:00 - 01:00	Install and set casing slips w/ 160 klb., ok.
01:00 - 02:30	Prepare maneouver to N/D 13 5/8" BOP. L/D cement head, cut 7" csg landing joint and move to barge.
02:30 - 05:00	N/D BOP 13 5/8" X 5M, drilling spool 13 5/8" x 5M, riser 13 5/8" x 5M.
05:00 - 07:30	Pepesa welder cut and bevel 7" casing and install section "C" casing head 11x3M; 7 1/16"x5M. Tight bolts.
07:30 - 08:30	Perform section "C" test, R54 ring gasket and pack off w/ 500 psi & 1900 psi by 10 min, OK.
08:30 - 13:30	Install 7 1/16" riser, N/U 7 1/16" drilling spool & handle 7 1/16" x 5M BOP. Move material from platform to Perla barge.
13:30 - 14:30	Install plug tester and perform 7 1/16" BOP funtion test: 3 1/2" pipe rams open/close: 4 sec/4 sec, blind ram open/close: 4 sec/4 sec.
14:30 - 15:00	Pressure test 7 1/16" BOP in progress.
15:00 - 19:30	Perform 7 1/16" BOP test: Brind Ram w/ external valves of manifold (#9, 10 & 11) w/ 300 & 3000 psi by 10 min, ok. Blind Ram w/ medium valves of manifold (#6, 7, 8) w/300 & 3000 psi, by 10 min, ok. P/T Blind Ram w/ internal valves of manifold (#1, 2, 3, 4 & 5) w/300 & 3000 psi, by 10 min, ok. Install 2 7/8" tbg and continue BOP test, anular w/ HCR manual w/300 & 1500 psi by 10 min, ok. P/T Pipe Ram w/HCR manual w/300 psi & 3000 psi by 10 min, ok. Perform stand pipe, BOP and manifold test w/ 300 & 3000 psi by 10 min, ok.

19:30 - 20:00	Pepesa Rig service.
20:00 - 21:00	Retrieve plug tester and install wear bushing. Condition rig floor. Install 3 1/2" IF saver sub in top drive.
21:00 - 23:00	Installing bell niple on 7 1/16" BOP and flow line.
23:00 - 00:00	Lay down 5" drill pipe, 5" HWDP. Move DP from platform to Perla barge.

February 15th, 2013

00:00 - 06:00	Continue lay down 5" drill pipe. Move DP from platform to Perla barge.
06:00 - 13:00	Continue L/D 5" drill pipe and 6 3/4" DC.
13:00 - 15:00	Finish to L/D 5" DP. Moving 5" drill pipe from platform to barge. Organize DP on Perla racks prior to rig up 3 1/2" DP, HWDP and DC.
15:00 - 00:00	Rig up 3 1/2" DP from barge to platform. Pepesa measure and take serial number. M/U 3 1/2" stand.

February 16th, 2013

00:00 - 04:00	Continue M/U 3 1/2" DP in stands. Rig up directional tool.
04:00 - 06:00	M/U and RIH dir. BHA w/ 6 1/8" PDC bit. (Bit M513 jets 5x11;2x13, Mud motor BH 1.15 deg, UBHO, 2 flex monel w/ MWD, 4 DC 4 3/4") to 122 ft.
06:00 - 09:00	Vessel Gulf Scout arrived to location, receiving barite on Perla barge. Move 3 1/2" HWDP from barge to platform. RIH BHA w/ 6 1/8" PDC to 770 ft. Circulate to perform shallow test MWD, tool synchroniz.
09:00 - 10:00	Calibrator stuck inside 3 1/2" HWDP in 5 joint. Clean joints.
10:00 - 12:00	Continue TIH dir. BHA w/ 6 1/8" PDC bit from 770' to 1040'. Calibrate joint per joint, clean joints with water and hammer.
12:00 - 15:00	Continue TIH dir. BHA w/ 6 1/8" PDC bit from 1040' to 3000'.
15:00 - 15:30	At 3000 ft, test circulation with 600 psi, pressure hold, no discharge. try again, pressure no discharge.
15:30 - 18:30	POOH dir. BHA w/ 6 1/8". L/D slim pulse (MWD). Observe Halliburton mud compacted inside directional tool, MWD, mud motor and 1 flex monel.
18:30 - 20:30	Clean and circulate surface lines, pumps lines, stand pipe with sea water.
20:30 - 22:00	M/U and RIH Slick BHA with 6 1/8" tricone bit to condition mud and drill cement. RIH to 580', test circulation, full return. Ok.
22:00 - 00:00	Continue RIH Slick BHA with 6 1/8" tricone bit from 580' to 1500'. Circulate, full return, ok.

February 17th, 2013

00:00 - 01:30	RIH slick BHA w/ 6 1/8" tricone bit from 1500' to 3000'.
01:30 - 02:00	Circulate bottom up, ok.
02:00 - 03:00	Cut off 120 ft and slip 100 ft of top drive drilling line.
03:00 - 07:30	Continue RIH slick BHA w/ 6 1/8" tricone bit from 3000' to 6000'. joint per joint.
07:30 - 08:30	Circulate to test circulation and condition mud. ok.
08:30 - 11:30	Continue RIH from 6000' to 7200'. joint per joint.
11:30 - 12:00	Circulate to test circulation and condition mud. ok.
12:00 - 14:30	RIH slick BHA from 7200' to 7836'. Last 5 stands with circulation. Tag TOC at 7836'.
14:30 - 15:00	Drill out top/bottom plug and float collar at 7842'.
15:00 - 16:00	Continue drilling out cement from 7842 to 7906'. WOB 10 klbs, 250 gpm, 2100 psi, 71 spm.
16:00 - 16:30	Perform casing test with 1500 psi. 10 min. ok.
16:30 - 17:00	Continue drilling out cement from 7906' to 7921' shoe.

17:00 - 19:00	Drill out cement contaminated with mud from 7921' to 8114'. WOB 4-5 klbs, 243 gpm, pres 2250 psi, 63 rpm.
19:00 - 21:00	Displace contaminated mud for new mud 11.2 ppg. and circulate. Pull out string to 7888' inside casing.
21:00 - 21:30	Perform FIT gradually, increase pressure to 450 psi, drop to 410 psi, EMW 12.5 ppg. ok.
21:30 - 00:00	POOH slick BHA w/ 3 1/2" DP and 6 1/8" tricone bit from 7888' to 2500'.

February 18th, 2013

00:00 - 02:30	Continue POOH slick BHA with 6 1/8" tricone bit from 2500' to surface.
02:30 - 06:00	M/U and RIH directional BHA with 3 1/2" DP and 6 1/8" PDC bit M513 jets 5x11;2x13, mud motor BH 1.15, UBHO, MWD flex monels, 4 DC 4 3/4", 20 HWDP 3 1/2", Jar, 6 HWDP 3 1/2", 3 1/2" DP to 1800'.
06:00 - 06:30	Test circulation and condition mud. ok.
06:30 - 07:00	RIH dir. BHA w/ 3 1/2" DP and 6 1/8" PDC bit from 1800' to 3000'.
07:00 - 07:30	Test circulation, ok. MW: 11.2 ppg.
07:30 - 12:00	Continue RIH dir. BHA w/ 3 1/2" DP and 6 1/8" PDC bit from 3000' to 8114'. Last 3 stands with pump.
12:00 - 12:30	Dir. drill rotating from 8114' to 8124'. WOB 11 klbs, 60 rpm, pres 2100 psi, 200 gpm.
12:30 - 14:30	Dir. drill sliding from 8124' to 8133'. WOB 37 klbs, pres 2135 psi, 200 gpm.
14:30 - 20:30	Dir. drill rotating from 8133' to 8295'. WOB 14 klbs, pres 2550 psi., 240 gpm, 60 rpm, TQ 10 kft-lb. Geology sample at 8120', 80% sand, 10% sandstone, 10% claystone.
20:30 - 21:00	Ream and take survey @ 8245', inc 46.9 deg, azm 197 deg. Pepesa increase top drive set torque and max torque from 2000/2400 psi, to 2200/2600 psi.
21:00 - 00:00	Dir. drill rotating from 8295' to 8390'. WOB 14 klbs, pres 2650 psi., 242 gpm, 66 rpm, TQ 10 kft-lb. Survey @ 8339', inc 45.2 deg, azm 197.7 deg. DL 1.89.

February 19th, 2013

00:00 - 00:30	Dir. drill rotating w/ 6 1/8" PDC bit from 8390' to 8401'.
00:30 - 01:00	Directional personnel synchronice MWD and position tool face prior to slide.
01:00 - 03:00	Dir. drill sliding from 8401' to 8421. WOB 39 klbs, pres 3000 psi, 235 gpm.
03:00 - 03:30	Ream and circulate.
03:30 - 06:30	Dir. drill rotating from 8421' to 8501'. WOB 14/15 klbs, pres 3060 psi, 245 gpm, 70 rpm, TQ 11 kft/lb. String weight w/ pump and rotation 145 klb up, 132 klb neutral, 110 klb down. Survey @ 8434', inc 45.4 deg, azm 197.8 deg. Geology sample @ 8440', 100% claystone.
06:30 - 08:30	Dir. drill sliding from 8501' to 8516'. WOB 40 klbs, pres 2560 psi, 200 gpm.
08:30 - 09:00	Perform blow out fire drill on platform and barge with all personnel, perform safety meeting.
09:00 - 12:00	Dir. drill rotating from 8516' to 8592'. WOB 9 klbs, pres 3180 psi, 66 rpm, 230 gpm, TQ 11.2 kft-lb.
12:00 - 17:30	Dir. drill sliding from 8592' to 8618'. WOB 40 klbs, pres 2800 psi, 211 gpm. Last survey @ 8528', inc 44.8 deg, azm 198.7 deg. Geology sample @ 8590', 90% claystone, 10% sand. FM San Cristóbal.
17:30 - 19:00	Dir. drill rotating from 8618' to 8686'. WOB 14 klbs, 235 gpm, pres 3200 psi, 70 rpm, TQ 11.2 kft-lb.
19:00 - 19:30	Ream and take survey @ 8623', inc 46.20 deg, azm 198.9 deg.
19:30 - 00:00	Dir. drill sliding from 8686' to 8709' WOB 39 klbs, pres 2600 psi, 210 gpm.

February 20th, 2013

00:00 - 02:30	Dir. drill rotating from 8709' to 8780' WOB 15 klbs, pres 3000 psi, 220 gpm, 73 rpm, TQ 11 kft-lb.
02:30 - 05:00	Dir. drill sliding from 8780' 8796' WOB 38 klbs, pres 3009 psi, 221 gpm.
05:00 - 06:00	Dir. drill rotating from 8796' to 8815' WOB 14 klbs, pres 3031 psi, 220 gpm, 68 rpm, TQ 11.2 kft-lb. Survey @ 8717 ft, inc 46.20 deg, azm 198.9 deg. Geology sample @ 8790' 60% claystone, 30% siltstone, 10% sandstone. String weight with out rotating up 205 klbs, down 95 klbs.
06:00 - 09:00	Dir. drill rotating from 8815' to 8874', WOB 15 klbs, pres 3250 psi, 240 gpm, 70 rpm, TQ 11.2 kft-lb.
09:00 - 09:30	Ream and take survey @ 8812', inc 45.4 deg, azm 198.7 deg.
09:30 - 14:30	Dir. drilling sliding from 8874' to 8898'. WOB 42 klbs, pres 2400 psi, 180 gpm.
14:30 - 19:00	Dir. drill rotating from 8898' to 8968'. WOB 14 klbs, 240 gpm, pres 3250 psi, 67 rpm, TQ 11.5kft-lb.
19:00 - 19:30	Ream and take survey @ 8906', inc 46.1 deg, azm 198.3 deg.
19:30 - 23:00	Dir. drill sliding from 8968' to 8984'. WOB 30 klbs, pres 2500 psi, 180 gpm.
23:00 - 23:30	Rig services (precharge of mud pumps present problems with valves).
23:30 - 00:00	Dir. drill sliding from 8984' to 8986'. WOB 30 klbs, pres 2500 psi, 180 gpm.

February 21st, 2013

00:00 - 01:30	Dir. drill sliding from 8986' to 8990'. WOB 30 klbs, pres 2500 psi, 180 gpm.
01:30 - 04:30	Dir. drill rotating from 8990' to 9051'. WOB 15 klbs, 200 gpm, pres 2950 psi, 60 rpm, TQ 11 kft-lb.
04:30 - 06:30	Ream and take survey at 9001', inc 48 deg, azm 197.5 deg. Continue circulate to condition hole, pump 20 bbl HVP and displace with 230 gpm, 3200 psi. Finish circulation to perform short trip.
06:30 - 08:00	Perform short trip to calibrate hole from 9051' to 7900' with normal drag.
08:00 - 08:30	Arrive to platform Sr. Armando Eneque Puicom from OEFA inspector and engs. Manuel Inga and Wilmer Cueva (Drilling Dpt) and Natalia Tengal (QHSE) from Savia Perú S.A to perform audit on LO6 platform.
08:30 - 09:00	Pepesa mechanics change 2 valves of centrifuge pumps (pre-change mud pumps).
09:00 - 10:00	RIH 6 1/8" directional BHA from 7900´ to bottom, last 2 stands wash down.
10:00 - 10:30	Complete circulation a bottom up to displace trip gas (1700 ppm), with 220 gpm, 2500 psi.
10:30 - 11:00	Directional drill rotating from 9051' to 9062': 220 gpm, pres 3200 psi, 15 klb wob, 60 rpm, tq 11 kft-lb, ROP avg 22 ft/hr.
11:00 - 15:00	Directional drill sliding from 9062' to 9075' with dificult to slid, mud motor stalling several times and move the mud motor TF: 180 gpm, pres 2600 psi, 30 klb wob, ROP avg 3.5 ft/hr.
15:00 - 15:30	Perform rig services: L/D stand to condition drilling line bed on drum of drawwork.
15:30 - 20:30	Accum. directional drill rotary from 9075´ to 9252´: 200 gpm, pres 3200 psi, 15 klb wob, tq 11 klb-ft, ROP avg 34.7 ft/hr.
20:30 - 22:30	Circulate, ream and take survey at 9096 ft, inc 48.3 deg, azm 179 deg.
22:30 - 00:00	Directional drill sliding from 9252' to 9260' with dificult to slid, mud motor stalling several times and move the mud motor TF with 180 gpm, pres 2650 psi, 30 klb wob, ROP avg 5.33 ft/hr.

February 22nd, 2013

00:00 - 03:30	Directional drill sliding from 9260' to 9273' with dificult to slid, mud motor stalling several times and move the mud motor TF. 180 gpm, pres 2650 psi, 30 klb wob, ROP avg 4.1 ft/hr.
03:30 - 05:30	Directional drill rotary from 9273´ to 9333´: 200 gpm, pres 3200 psi, 15 klb wob, tq 11 klb-ft, ROP avg 24.6 ft/hr. Last geology sample at 9300 ft, 60% Clyst, 30% Sst and 10% Sand.
05:30 - 06:00	Accumulate circulating, reaming, surveys & connections. Last survey at 9264' inc 47 deg, azm 197.5 deg.
06:00 - 06:30	Directional drill rotary from 9333´ to 9345´: 200 gpm, pres 3180 psi, 15 klb wob, tq 11 klb-ft, ROP avg 34.3 ft/hr.
06:30 - 12:00	Directional drill sliding from 9345' to 9363' with dificult to slid, mud motor stalling several times and move the mud motor TF. 180 gpm, pres 2650 psi, 30 klb wob, ROP avg 3.4 ft/hr.
12:00 - 15:00	Accum. directional drill rotary from 9363´ to 9440´: 220 gpm, pres 3500 psi, 15 klb wob, tq 11.5 klb-ft, ROP avg 25.7 ft/hr.
15:00 - 17:00	Accumulate circulating, reaming, surveys & connections. Last survey at 9379' inc 47.7 deg, azm 197.6 deg.
17:00 - 18:00	Directional drill sliding from 9440' to 9444' with dificult to slid with 180 gpm, pres 2850 psi, 30 klb wob, ROP avg 4.6 ft/hr.
18:00 - 21:30	Accum. directional drill rotary from 9444´ to 9595´: 210 gpm, pres 3500 psi, 15 klb wob, tq 11.5 klb-ft, ROP avg 47.4 ft/hr.
21:30 - 00:00	Accumulate circulating, reaming, surveys & connections. Last survey at 9473' inc 47.0 deg, azm 198.2 deg. Last geology sample at 9595 ft, 90% Clyst and 10% Sst.

February 23rd, 2013

00:00 - 01:30	Accum. directional drill rotary from 9595´ to 9628´: 210 gpm, pres 3500 psi, 15 klb wob, tq 11.5 klb-ft, ROP avg 30.5 ft/hr.
01:30 - 03:00	Accumulate circulating, reaming, surveys & connections. Last survey at 9568' inc 45.1 deg, azm 199.0 deg.
03:00 - 04:30	Directional drill sliding from 9628' to 9636' with dificult to slid with 180 gpm, pres 2980 psi, 30 klb wob, ROP avg 4.8 ft/hr.
04:30 - 10:30	Accum, directional drill rotary from 9636´ to 9805´: 210 gpm, pres 3500 psi, 15/18 klb wob, tq 12 klb-ft, ROP avg 28.8 ft/hr. Last geology sample at 9800 ft, 100% Clyst.
10:30 - 12:00	Accumulate circulating, reaming, surveys & connections. Last survey at 9757' inc 42.6 deg, azm 200.3 deg.
12:00 - 13:30	Circulate and reciprocate with 210 gpm, 3400 psi and pump 25 bbl HVP (180 sec/qt) and displace with circulation a bottom up.
13:30 - 19:30	Accum, directional drill rotary from 9805´ to 9994´: 210 gpm, pres 3500 psi, 15/18 klb wob, tq 12 klb-ft, ROP avg 31.4 ft/hr. Last geology sample at 9990 ft, 100% Clyst.
19:30 - 23:30	Accumulate circulating, reaming, surveys & connections. At 9994 ft drilling string stop by high torq (12.5 klb-ft) when maneuver reaming and backreaming. Change TD set torq at 13.5 klb-ft and TD max. torq at 14.5 klbs to continue drilling. Last survey at 9946' inc 40.5 deg, azm 201.9 deg.

23:30 - 00:00	Directional drill rotary from 9994´ to 10015´: 200 gpm, pres 3450 psi, 15/18 klb wob, tq 12 klb-ft, ROP avg 39.6 ft/hr. Last geology sample at 10010 ft, 100% Clyst.

February 24th, 2013

00:00 - 05:30	Accum, directional drill rotary from 10015´ to 10175´: 200 gpm, pres 3500 psi, 15/18 klb wob, tq 12 klb-ft, ROP avg 30.3 ft/hr. Last geology sample at 10130 ft, 100% Clyst.
05:30 - 06:30	Circulating, reaming, surveys & connections. Last survey at 10040' inc 39.2 deg, azm 203.1 deg.
06:30 - 10:30	Accum, directional drill rotary from 10175´ to 10279´: 200 gpm, pres 3500 psi, 15/18 klb wob, tq 12 klb-ft, ROP avg 28.5 ft/hr. Last geology sample at 10130 ft, 100% Clyst.
10:30 - 11:30	Circulating and reciprocate a bottom up Geology recover a bottom sample at 10279 ft, 100% Clyst. Last survey at 10229' inc 37.2 deg, azm 205.3 deg.
11:30 - 13:30	Continue circulate with 210 gpm and 3600 psi. Pump 30 bbl HVP, 180 sec/qt and displace to clean hole and circulate up to clean shakers.
13:30 - 17:00	Perform short trip: POOH 6 1/8" directional BHA from 10279 ft to 8560 ft with back reaming (D/U 180 klb) and circulate with 180 gpm, 3200 psi.
17:00 - 17:30	At 8560 ft circulate with 200 gpm and 3400 psi to clean hole.
17:30 - 18:30	Continue POOH 6 1/8" directional BHA from 8560 ft to 7633 ft with back reaming and circulate with 200 gpm, 3350 psi.
18:30 - 19:00	At 7633 ft circulate with 200 gpm and 3350 psi to clean 6 1/8" BHA.
19:00 - 19.30	Pepesa mechanics perform rig services: Power unit and TD.
19:30 - 23:30	RIH from 7633 ft to 10260 ft and Cia WWT install reduced torque tools on each 3 1/2" DP. Last 4 stands wash down with 200 gpm, 3200 psi.
23:30 - 00:00	Circulate on bottom with 200 gpm and 3400 psi to displace trip gas.

February 25th, 2013

00:00 - 01:00	Continue circulate with 200 gpm and 3400 psi to displace trip gas (8000 ppm).
01:00 - 01:30	Rig services.
01:30 - 02:00	Rig repair: Start drill rotary with 200 gpm, pres 3500 psi. Pepesa change mud pump # 1 by Mud Pump #2 by packing problems.
02:00 - 07:00	Directional drill rotary from 10279´ to 10302´: 200 gpm, pres 3500 psi, 10/15 klb wob, tq 9/10 klb-ft, ROP avg 5 ft/hr. Last geology sample at 10290 ft, 100% Clyst.
07:00 - 09:00	Circulate with 210 gpm and 3600 psi and pump 30 bbl HVP, 180 sec/qt and displace to clean hole and circulate up to clean shakers.
09:00 - 13:00	POOH 6 1/8" directional BHA from 10302 ft to 7800 ft. Perform flow check by 10 min. Pump 15 bbl sluge pipe (13 ppg).
13:00 - 18:30	Continue POOH 6 1/8" directional BHA from 7800 ft to surface. Fill up well each 5 stands.
18:30 - 19:00	L/D BHA 6 1/8" PDC bit, 4 3/4" Mud Motor, 4 3/4" UBHO and 4 3/4" Flex Monel.
19:00 - 21:00	M/U BHA 6 1/8" PDC bit, MSi513UBPX, n/s JY6674, jets 3x14+2x15, 4 3/4" Mud Motor, 4 3/4" Pony Flex Monel, 4 3/4" Flex Monel, Install slim pulse (MWD) and aligan mud motor, 4 jt 4 3/4" DC, 3 1/2" HWDP .
21:00 - 21:30	Phoenix MWD eng. perform shallow test with 190 gpm, 700 psi by10 min, ok.
21:30 - 00:00	Continue RIH 6 1/8" directional BHA from 270 ft to 4270 ft, fill up pipe each 2000 ft. and circulate to confirm return.

February 26th, 2013

00:00 - 02:00	Continue RIH 6 1/8" directional BHA from 4270 ft to 7830 ft, fill up pipe each 2000 ft and circulation to confirm return.
02:00 - 03:00	At 7" csg shoe 7830 ft break gels and circulate with 160 gpm and 1900 psi.
03:00 - 04:00	Cut 110 ft and slip 120 ft of 1 1/4" drilling line.
04:00 - 06:30	Continue RIH 6 1/8" directional BHA from 7830 ft to 10302 ft, last four stand wash down to bottom and continue circulate up to displace gas trip (8500 ppm).
06:30 - 08:00	Directional drill rotary from 10302 ft to 10305 ft. drilled with reduced parameters to condition PDC bit and avoid bit balling; 200 gpm, pres 3400 psi, 3/8 klb wob, tq 9 klb-ft, ROP avg 3 ft/hr. Last geology sample at 10300 ft, 100% Clyst.
08:00 - 14:00	Directional drill rotary from 10305 ft to 10326 ft; 215 gpm, pres 3700 psi, 10/28 klb wob, tq 9/10 klb-ft, ROP avg 5 ft/hr. Attempt increase ROP with several drilling parameters without success. At 10311 ft pump 15 bbl disperse pill with drilling deterge (30% Aktaflo-s) to bit balling and continue maneuvers attempt increase ROP without success. At 10321 ft pump 15 bbl disperse pill with drilling deterge (30% Aktaflo-s) to bit balling and continue maneuvers attempt increase ROP without success.
14:00 - 14:30	Maneuver drilling string with 3-5 klbs wob and 90 rpm. While pump on the fly 20 bbl with abrasive pill (20 lb/bbl wall nut shells).
14:30 - 17:30	Re-start directional drill rotary increase gradualitilly wob from 5 klb to 25 klb, drill from 10326 ft to 10358 ft with 200 gpm, 3600 psi, 80 rpm, tq 10 klb-ft, ROP avg 12.0 ft/hr.
17:30 - 18:00	Maneuver drilling string with 5 klbs wob and 90 rpm. While pump on the fly 15 bbl with abrasive pill (20 lb/bbl wall nut shells).
18:00 - 22:00	Directional drill rotary from 10358 ft to 10385 ft with 200 gpm, 3600 psi, 70 rpm, tq 10 klb-ft, ROP avg 6.8 ft/hr. Last geology sample at 10370 ft, 60% Clyst, 30% Sd, 10% Sst.
22:00 - 23:30	Accumulate circulating, reaming, surveys & connections. Last survey at 10324' inc 36.9 deg, azm 205.4 deg.
23:30 - 00:00	Directional drill rotary from 10385 ft to 10390 ft with 200 gpm, 3600 psi, 70 rpm, tq 10 klb-ft, ROP avg 9 ft/hr. Last geology sample at 10390 ft, 90% Clyst and 10% Sst.

February 27th, 2013

00:00 - 14:00	Directional drill rotary from 10390 ft to 10479 ft with 200 gpm, 3700 psi, 80 rpm, tq 10 klb-ft, ROP avg 6.8 ft/hr. Last geology sample at 10470 ft, 100% Clyst.
14:00 - 15:00	Accum. time to change mud pump: circulate with 200 gpm, 3600 psi. At 10468 ft maneuver drilling string with 5 klbs wob and 90 rpm while pump on the fly 10 bbl with abrasive pill (10 lb/bbl wall nut shells).
15:00 - 16:00	Circulating, reaming, surveys & connections. Last survey at 10419' inc 37.5 deg, azm 205.1 deg.
16:00 - 23:00	Directional drill rotary from 10479 ft to 10522 ft with 200 gpm, 3700 psi, 80 rpm, tq 10 klb-ft, ROP avg 6.6 ft/hr. Last geology sample at 10510 ft, 90% Clyst and 10% Sst.
23:00 - 00:00	Accum. time to change mud pump: circulate with 200 gpm, 3600 psi. At 10510 ft maneuver drilling string with 5 klbs wob and 90 rpm while pump on the fly 10 bbl with abrasive pill (10 lb/bbl wall nut shells).

February 28th, 2013

00:00 - 05:30	Directional drill rotary from 10522 ft to 10556 ft with 200 gpm, 3700 psi, 80 rpm, tq 10 klb-ft, ROP avg 6.3 ft/hr. Last geology sample at 10540 ft, 100% Clyst.
05:30 - 06:30	Accum. time to change mud pump: circulate with 200 gpm, 3600 psi. At 10550 ft maneuver drilling string with 5 klbs wob and 90 rpm while pump on the fly 10 bbl with abrasive pill (10 lb/bbl wall nut shells).
06:30 - 10:00	Directional drill rotary from 10556 ft to 10574 ft with 200 gpm, 3700 psi, 80 rpm, tq 10 klb-ft, ROP avg 5.3 ft/hr.
10:00 - 11:00	Circulating and reciprocate a bottom up, 200 gpm, 3650 psi. Geology recover a bottom sample at 10574 ft, 100% Clyst.
11:00 - 12:30	Continue circulate with 210 gpm and 3700 psi. Pump 30 bbl HVP, 170 sec/qt and displace to clean hole and circulate up to clean shakers.
12:30 - 16:30	POOH 6 1/8" directional BHA from 10574 ft to 7900 ft. Perform flow check by 10 min, ok. Pump 15 bbl sluge pipe (13 ppg).
16:30 - 22:00	Continue POOH 6 1/8" directional BHA from 7900 ft to surface. Fill up well each 5 stands. L/D BHA 6 1/8" PDC bit, 4 3/4" Mud Motor, 4 3/4" UBHO, 4 3/4" Flex Monel, MWD monel.
22:00 - 00:00	M/U BHA 6 1/8" PDC bit, Mi513UBPX, n/s JE3026, jets 3x14+2x15, 4 3/4" Mud Motor, 8 jt 4 3/4" DC, 3 1/2" HWDP to 340 ft. Perform Mud Motor test with 190 psi and 600 psi.

March 01st, 2013

00:00 - 05:00	Continue RIH 6 1/8" directional BHA from 340 ft to 7880 ft, fill up pipe each 2000 ft and circulate by 10 min. to confirm return.
05:00 - 05:30	At 7" Csg shoe 7880 ft break gels and circulate with 210 gpm and 2700 psi.
05:30 - 06:00	TD rig services.
06:00 - 08:30	RIH 6 1/8" directional BHA from 8250 ft to 10529 ft. Last four stand wash down with 190 gpm, 3200 psi.
08:30 - 09:30	Continue wash down to bottom and circulate with 210 gpm, 3700 psi to displace trip gas (45000 ppm).
09:30 - 14:00	Accm. directional drill rotary from 10574 ft to 10622 ft with 205 gpm, 3650 psi, 80 rpm, tq 10/11 klb-ft, ROP avg 12.5 ft/hr.
14:00 - 14:30	Accum. circulating, reaming & connections with 205 gpm, 3600 psi. Last geology sample at 10610 ft, 100% Clyst.
14:30 - 21:00	Accm. directional drill rotary from 10522 ft to 10718 ft with 200 gpm, 3700 psi, 80 rpm, tq 10/11 klb-ft, ROP avg 14.5 ft/hr.
21:00 - 22:00	Circulating, reaming & connections with 205 gpm, 3600 psi. Last geology sample at 10700 ft, 70% Clyst, 30% Sd.
22:00 - 22:30	Rig Services: Relief valve from mud pump broke several times.
22:30 - 23:00	Relief valve from mud pump broke several times.
23:00 - 00:00	Directional drill rotary from 10718 ft to 10728 ft with 200 gpm, 3650 psi, 80 rpm, tq 10/11 klb-ft, ROP avg 10.0 ft/hr. Last geology sample at 10728 ft, 90% Clyst and 10% Sst.

March 02nd, 2013

00:00 - 08:00	Directional drill rotary from 10728 ft to 10812 ft with 200 gpm, 3650 psi, wob 10/15 klb, 80 rpm, tq 10/11 klb-ft, ROP avg 12 ft/hr. Last geology sample at 10800 ft, 100% Clyst. Maneuver drilling string three times with 10 klbs wob and 90 rpm while pump on

	the fly 10 bbl with disperse and abrasive pills (10 lb/bbl wall nut shells) to avoid bill balling.
08:00 - 09:30	Circulating, reaming and back reaming to connections, D/U 185 klb, S/O 115 klb, HL 147 klb.
09:30 - 10:00	Directional drill rotary from 10812 ft to 10816 ft with 200 gpm, 3650 psi, wob 10/15 klb, 80 rpm, tq 10/11 klb-ft, ROP avg 10 ft/hr. Stop drilling by mud pump problems.
10:00 - 10:30	Rig Services, acumulate time by change mud pump for packing problems.
10:30 - 11:00	Rig repair, Relief valve from mud pump broke several times.
11:00 - 21:30	Accum. directional drill rotary from 10816 ft to 10906 ft with 200 gpm, 3700 psi, wob 15/23 klb, 80 rpm, tq 11/12 klb-ft, ROP avg 9.8 ft/hr. Last geology sample at 10610 ft, 100% Clyst.
21:30 - 00:00	Accum. circulating, reaming, backreaming & connections with 200 gpm, 3650 psi. Maneuver drilling string several times with 10 klbs wob and 90 rpm. while pump on the fly 10 bbl with disperse and abrasive pills (10 lb/bbl wall nut shells) to avoid bill balling.

March 03rd, 2013

00:00 - 01:00	Circulating, reaming and back reaming to connections, reaming several times to reduce trip out :13.5 klb-ft and trip in: 9 klb-ft torque. D/U 185 klb, S/O 115 klb, HL 147 klb.
01:00 - 04:30	Accum. directional drill rotary from 10906 ft to 10924 ft with 200 gpm, 3700 psi, wob 15/25 klb, 80 rpm, tq 11/12 klb-ft, ROP avg 9.8 ft/hr. Last geology sample at 10910 ft, 100% Clyst.
04:30 - 05:30	Maneuver drilling string several times with 10 klbs wob and 90 rpm while pump on the fly 10 bbl with disperse and 10 bbl abrasive pills (10 lb/bbl wall nut shells) in tandem to avoid bill balling.
05:30 - 08:00	Directional drill rotary from 10924 ft to 10933 ft with 205 gpm, 3700 psi, wob 20/25 klb, 80 rpm, tq 11/12 klb-ft, ROP avg 5 ft/hr.
08:00 - 09:00	Reciprocate drilling string several times and drill with 8 klb to 15 klbs wob and 90 rpm while pump on the fly 15 bbl with disperse and 15 bbl abrasive pills (15 lb/bbl wall nut shells in tandem to avoid bill balling.
09:00 - 14:00	Directional drill rotary from 10933 ft to 11000 ft with 205 gpm, 3700 psi, wob 22/26 klb, 80 rpm, tq 11/12 klb-ft, ROP avg 13.4 ft/hr.
14:00 - 14:30	Circulating, reaming and back reaming several times to reduce trip out :13.5 klb-ft. and trip in: 9 klb-ft torque. D/U 190 klb, S/O 120 klb, HL 150 klb. Last geology sample at 10990 ft, 100% Clyst.
14:30 - 15:00	TD rig services and continue circulation to perform connection.
15:00 - 23:00	Directional drill rotary from 11000 ft to 11095 ft (TD) with 205 gpm, 3700 psi, wob 23/27 klb, 80 rpm, tq 11/12 klb-ft, ROP avg 13.7 ft/hr.
23:00 - 00:00	Circulating and reciprocate drill string a bottom up, 205 gpm, 3700 psi. Geology recover a bottom sample at 11095 ft, 100% Clyst.

March 04th, 2013

00:00 - 03:00	Continue circulating until clean shale shakers, pump 30 bbl viscous pill with 200 gpm and 3700 psi.
03:00 - 09:30	POOH 6 1/8" directional BHA from 11095 ft to 7880 ft.
09:30 - 10:00	At 7880 ft perform flow check by 10 min, ok. Pump 15 bbl sluge pipe (13 ppg).
10:00 - 15:00	Continue POOH 6 1/8" directional BHA from 7880 ft to surface. Fill up well each 5 stands. L/D BHA 6 1/8" PDC bit Mi513UBPX, n/s JE3026, jets 3x14+2x15, 4 3/4" Mud

	Motor, 8 jt 4 3/4" DC, 3 1/2" HWDP. Perform flow check by 10 min, ok.
15:00 - 18:00	M/U and RIH 6 1/8" slick BHA with 6 1/8" tricone bit w/o jets to 3840 ft fill up each 2000 ft and circulate to confirm return.
18:00 - 18:30	TD Rig Service.
18:30 - 21:30	Continue RIH 6 1/8" slick BHA with tricone 6 1/8" from 3840 ft to 7880 ft, fill up pipe each 2000 ft.
21:30 - 22:00	At 7880 ft break gel and circulate with 250 gpm, 3400 psi. Take parameters circulating: D/U 138 klb, S/O 90 klb, HL 120 klb. 50 rpm, 8.5 klb-ft. Parameters w/o circulation: D/U 180 klb, S/O 85 klb, HL 118 klb.
22:00 - 00:00	Continue RIH 6 1/8" slick BHA with tricone bit from 7880 ft to 10084 ft, fill up pipe each 1000 ft.

March 05th, 2013

00:00 - 02:00	Continue RIH slick BHA with tricone bit from 10084 ft to 11095 ft, last four stand wash down with 205 gpm, 3400 psi.
02:00 - 04:00	Circulate with 220 gpm, 3600 psi and displace trip gas (5600 units), pump 25 bbl viscosity and heavy pill, circulate a bottom up. Pump 25 bbl viscous and sweep e until clean shale. Take parameters with circulating & rotation: D/U 175 klb, S/O 120 klb, HL 150 klb. Attempted take parameters without circulation & rotation observed high drag (more 260 klb).
04:00 - 06:30	POOH 6 1/8" slick BHA with tricone bit from 11095 ft to 9990 ft with back reaming (D/U 190 klb) and circulate with 200 gpm, 3500 psi, due high drag.
06:30 - 09:00	Continue POOH 6 1/8" slick BHA with tricone bit from 9990 ft to 7880 ft with drag up 250 klb. Fill up hole each 5 stands.
09:00 - 09:30	At 7880 ft perform flow check by 10 min, ok. Install 3 1/2" wiper strip.
09:30 - 13:30	Continue POOH 6 1/8" slick BHA with tricone bit from 7880 ft to surface with normal drag (180 klb). L/D 6 1/8" slick BHA. Fill up hole each 5 stands.
13:30 - 14:00	Condition rig floor to locate the logging tools. Perform safety and operating meeting with wireline SLB, Pepesa and Savia crew to run logging tools.
14:00 - 16:00	M/U SLB logging tools (SP, BHC: Sonic, HRLT:Resistivity, TLD: Density, HGMS: Porosity and GR) on rig floor.
16:00 - 17:00	Run SLB logging tools to 1700 ft. Stop running logging tools due to SLB decide remove Bowl Spring (Neutron Log) from logging tool.
17:00 - 17:30	POOH SLB logging tools from 1700 ft to surface. SLB technician remove the bowl spring from logging tools.
17:30 - 20:00	Run SLB logging tools, take tension test at 7500 ft: 4300 Lbs, continue run, at 9820 ft perform tension test and logging tool stuck upwards at 9774 ft tension: 7900 lbs. attempt to out upwards with 7900 lbs twice without success, after third attempt looging tool released with 8000 lbs upward.
20:00 - 22:00	SLB run logging (SP, BHC: Sonic, HRLT:Resistivity, TLD: Density, HGMS: Porosity and GR) from 9600 ft to 7921 ft with normal tension.
22:00 - 23:00	SLB POOH logging tools from 7921 ft to surface.
23:00 - 00:00	SLB crew R/D logging tools and equipment.

March 06th, 2013

00:00 - 01:00	SLB crew continue R/D logging tools and equipment.
01:00 - 06:00	M/U and RIH 6 1/8" slick BHA with 6 1/8" tricone bit w/o jets to 7894 ft fill up each 2000 ft. and circulate to confirm return.

06:00 - 06:30	At 7894 ft break gels and circulate with 220 gpm, 2900 psi. Take parameters circulating & rotation : D/U 143 klb, S/O 100 klb, HL 120 klb. 50 rpm, 8.0 klb-ft. Parameters w/o circulation: D/U 175 klb.
06:30 - 09:30	Continue RIH 6 1/8" slick BHA with tricone bit from 7894 ft to 11095 ft, last four stands wash down with 225 gpm, 3650 psi. fill up pipe each 1000 ft.
09:30 - 13:00	Circulate with 225 gpm, 3680 psi and displace trip gas (3600 units), pump 30 bbl viscosity and heavy pill, circulate a bottom up. Pump 25 bbl viscous and sweep pill and circulate until clean shale. Take parameters with circulating & rotation: D/U 170 klb, S/O 115 klb, HL 150 klb. Attempted take parameters without circulation & rotation observed high drag (more 260 klb).
13:00 - 15:00	POOH 6 1/8" slick BHA with tricone bit from 11095 ft to 10059 ft with back reaming (D/U 185 klb) and circulate with 200 gpm, 3400 psi, due high drag. WWT technician remove reduced torque tools of 10 stand 3 1/2" DP (30 jt reduced torque).
15:00 - 17:30	Continue POOH 6 1/8" slick BHA with tricone bit from 10059 ft to 7800 ft. Fill up hole each 5 stands. WWT technician remove reduced torque tools of 25 stands 3 1/2" DP (75 jt reduced torque). At 7800 ft.
17:30 - 18:30	Slip 110 ft. and cut off 130 ft. 1 1/4" drilling line.
18:30 - 23:30	Continue POOH 6 1/8" slick BHA with tricone bit from 7800 ft to surface. L/D 6 1/8" slick BHA. Fill up hole each 5 stands.
23:30 - 00:00	M/U Running tool and recover wear bushing.

March 07th, 2013

00:00 - 04:30	Tramarsa crew download M/R Gulf Scout and pick up to platform 14 jt 4 1/2" slotted liner, 9 jt 4 1/2" blank liner, 79 jt 5" lines, WTF liner hangers tools and accesories, Sertong csg running equipment. Pepesa crew take measured 3 jt 4 1/2" slotted liner, 4 jt 4 1/2" blank liner and 79 jt 5" lines. WTF liner eng perform check list of liner hanger components.
04:30 - 06:00	Pepesa condition rig floor and Co. Sertong perform rig up hydraulic power tong, power unit and hydraulics hoses and install 4.5" csg liner elevator.
06:00 - 06:30	Perform safety and operative meeting with Pepesa, Halliburton, Sertong, Tramarsa, TGT lab and Savia.
06:30 - 08:30	M/U & RIH 4.5" guide shoe, 4 jt 4.5" blank liner 13.5 ppf, N-80, BTC; 3 jt slotted liner 13.5 ppg, N-80, BTC; 4.5" Landing Collar, 4.5" ACP PKR, 4.5" Handing Nipple, 4.5" BTC x5" BTC x/o and 5" Stage.
08:30 - 09:00	Change 4.5" csg liner elevator and 4.5" slip by 5" csg liner elevator and 5" slip.
09:00 - 10:30	M/U & run 15 jt 5" blank liner 18 ppg, N-80, BTC to 950 ft.
10:30 - 11:00	Tramarsa and Pepesa perform crew change, perform safety and operation meeting to continue operation.
11:00 - 14:30	M/U & run 79 jt 5" blank liner 18 ppg, N-80, BTC to 3367 ft.
14:30 - 15:00	TD technitian perform rig services.
15:00 - 15:30	Install 5" x 7" WCSH Hydraulic Liner Hanger w/top packer and 5" PBR WTSP4 to 3402 ft. WTF liner hanger technitian perform operative and safety meeting with all personnel.
15:30 - 16:00	Install 5" Liner wiper plug.
16:00 - 16:30	L/D power tong from Serton, install Hawk Jaw to continue run 5" Liner casing with drill pipe.
16:30 - 20:30	Run 6 stands of HWDP 3 1/2" NC38 from 3432 ft to 3955 ft and 41 stands of DP 3 1/2" NC38 from 3955 ft to 7863 ft.
20:30 - 21:00	Circulate with 91 gpm, 593 psi take paremeters 90 GPM, 610 psi, P/U 165 S/O 87 Klbs and w/o circulation P/U 175 Klbs SO 90Klbs.

21:00 - 22:00	M/U cementing Head and connect kelly cock valve lower at top.
22:00 - 00.00	Run 21 stands of 3 1/2" DP NC38 from 7863 ft to 9820 ft.

March 08th, 2013

00:00 - 00:30	At 9820 ft tag 4.5" csg liner w/40 klb, working string with circulation 85 gpm and 800 psi three times with success.
00:30 - 01:30	RIH from 9820 ft to 10426 ft, at 10426 ft tag 4.5" csg liner w/40 klb, working string twice with 40 gpm and 540 psi with success.
01:30 - 03:00	Continue RIH from 10426 ft to 11092 ft, last 06 stands wash down with 40 gpm and 540 psi.
03:00 - 05:30	Circulate at 11092 ft at bottom with 109 gpm and 910 psi.
05:30 - 07:00	Drop 1 1/4" ball inside 3 1/2" DP, displace with 35 gpm and 522 psi and increase pressure to 1300 psi to activate hanger.
07:00 - 07:30	Set liner hanger at 7700 ft, right turn around 8 times and released setting tool, check the hook load to confirm the freedom P/U: 175 Klbs and S/O: 110 klbs.
07:30 - 08:30	M/U cement head with DP 3 1/2" and safety valve closed at the top.
08:30 - 09:30	Halliburton M/U cementing lines and test with 5000 min x 10 min and perform safety and operational meeting.
09:30 - 10:30	Perform inflation of ACP Packer with 1700 psi, check the closed pressure with 1000 psi and 500 by 5 min and released the pressure, check volumen at tanks 9.25 bbl and take 0.5 bbls.
10:30 - 12:00	Perform the opening of Stage Tool with 3700 psi and circulate with 230 gpm and 3250 psi, conditioned mud properties.
12:00 - 14:00	Cement 5" liner as follows: pump 20 bbls of Mud flush to 5 bpm 8.33 ppg and 20 bbls tuned spacer of 12.5 ppg @ 5 bpm, prepared and pump. lead slurry 72 bbls Expandac 15.2 ppg, released the wiper plug and displacement with mud 11.9 ppg @ 5 bpm, observed pressure increase (3400 psi), down rate pump rate to 3 bpm from 50 to 70 bbls. (don´t observed DP wiper plug arrival on csg wiper plug), increase again the pump rate @ 5 bpm and 3200 psi. with 120 bbls, perform back flow: 0,5 bbls.
14:00 - 14:30	R/D cementing head and lines, TD connect on 3 1/2" DP and pick up 15 ft to applied from 40 to 60 klb w/ 10rpm, Top Packer setted at 7700 ft.
14:30 - 16:00	Circulate with 260 gpm and 3000 psi a bottom up observed return mud flush, spacers and cement contaminated with mud (10 bbls). Continue circulate to 3 1/2" DP clean.
16:00 - 23:30	POOH setting tool with DP 3 1/2" NC 38 from 7692 ft. to surface, B/O 26 stands DP 3 1/2", 6 stands HWDP 3 1/2".
23:30 - 00:00	Break out setting tool, observed without presence of wiper plug system.

CONCLUSIONS AND RECOMMENDATIONS

- The **LO6-27D**, is an Development well, and was drilled in four phases for 5" Liner from 7700 feet to 11092 feet.
- During 6.125" phase, it was used mud BARADRIL-N type with mud weight between 11.0 ppg and 11.9 ppg.
- The last survey took was at 10513.00 feet MD, 7828.50 feet TVD with 35.60º of inclination and 204.50 degrees azimuth.
- The reservoir Upper Basal Salina top structurally was found at 10332.00 ft MD (RT), 7683.92 ft. TVD (RT), at 633.92 ft more lower structurally.
- During trip, as is usual in petroleum industry, in order to a best control is recommended used Trip Tank, checking displacement or filling hole.
- It is necessary send lubricated pill in the finished run casing for cleaning hole before of the cementing operation.
- Due to high ROP´s reached with the PDC bit, was pumped heavy pills for clean hole.
- It is necessary to take care over all in sands in inclined wells due to the difficulty to maintain the pressure differential for controlling overpulls and then stuck pipes.