



TGT - LAB
REGISTROS GEOLOGICOS

FINAL WELL REPORT

WELL: LO6-31D

MAY-JUNE 2013

SAVIA PERU S.A.



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INTRODUCTION

TGT – LAB S.A.C. started Mud Logging Operations on the Well LO6-31D on May 24th, 2013 at 505 feet depth, and finished on June 13th, at the depth of 7668.0 feet TD(RT), with 5.5" Casing cementation; Casing Shoe at 7666 feet.

Origin:	
Surface Northing	9'508,651.50 m.
Surface Easting	459,047.72 m.
Main objective:	Rio Bravo Formation
Objective Northing	9'508,087.08 m
Objective Easting	458,178.39 m
Kelly Bushing	50 ft.
Water depth	-335 ft.
Total Depth	7668 ft.
Reference	DATUM-WGS -84 UTM

It is proposed to drill a development well LO6-31D to produce oil of Rio Bravo reservoir in Lobitos oil field.

The well LO6-31D will be drilled from platform Lobitos 6 and will reach a final depth of 4687.92 feet (TVD).

The geological control for Rio Bravo 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 LO6-31D from 505 feet measured depth (Rotary Table) from May 24th, 2013; to the Final Total Depth at 7668 feet that was reached on June 13th, 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 pneumatic shaker box

Gas Chromatograph FID SRI 8610C gas cycle 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 505 to 4500 feet; and each 10 feet from 4500 feet to 7668 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 $\frac{1}{2}$ 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.

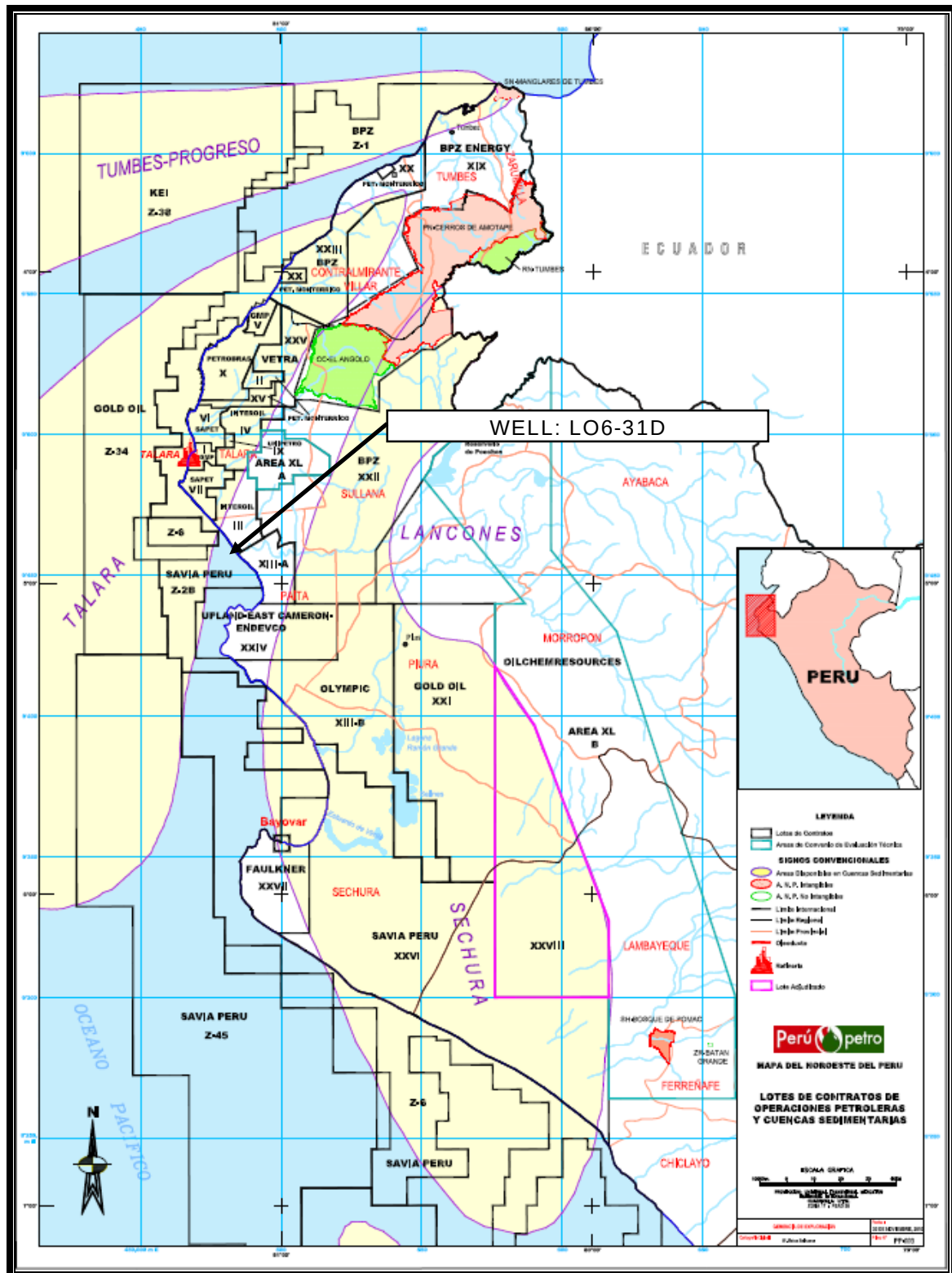


GEOLOGICAL REPORT



WELL AND RIG DATA

Company:	SAVIA PERU	
Well Name:	LO6-31D	
Well Type:	DEVELOPMENT	
Field:	LOBITOS OFFSHORE	
Basin:	TALARA	
State:	PIURA	
Country:	PERU	
Coordinates (WGS-84 UTM):	North	East
Origin:		
Main Objective: (RIO BRAVO FM)	9'508,087.08 m	458,178.39 m
Rotary table:	50 ft.	
Water Depth:	-335 ft.	
Spud Date:	MAY 20 th 2013	
End Date:	JUNE 10 th 2013	
Total Depth:	7668.0 ft. MD (RT); 4687.92 ft. TVD (RT)	
Drilling Contractor / Rig:	PEPESA / P-40	
Drilling Fluids:	WEATERFORD	
Logging Contractor:	WEATERFORD	
Mud logging / Unit:	TGT – LAB	
Well site Geologist:	A. ORTEGA	
TGT-LAB Geologist:	G. CARDOZA / E. SANTISTEBAN.	





FORMATION TOPS



WELL LO6-31D

Elevación RKB:

50 ft

SEA DEPTH:

335 ft

ROTARY TABLE: 50 ft.	PREDICTED TOPS			LITHOLOGIC TOPS BY SAMPLES		
FORMATION/ZONE	MD (ft)	DEPTH TVD (ft)	DEPTH	MD (ft)	DEPTH TVD (ft)	DEPTH SSTVD (ft)
	RT (ft)		SSTVD (ft)	RT (ft)		
Talara	-	-	-	-	-	-
Chacra	3045.0	2300.0	-2250.0	3125.0	2355.83	-2305.83
Rio Bravo	5175.0	3390.0	-3340.0	5087.0	3268.36	-3218.36
Rio Bravo Shaly	8320.0	5200.0	-5150.0	7489.0	4568.31	-4518.31
Final T.D.	8544.0	5350.0	-5300.0	7668.0	4687.92	-4637.92



AGE		FORMATION/MEMBER	THICKNESS (ft)	LITHOLOGY	DESCRIPTION
CENOZOIC	TERTIARY	Eocene	TALARA	1850.8	CLAYSTONE: olv blk, loc med dk gry, olv gry, ea, blkly-sbbkly, occ amor, mod sft-mod frm, micmic, miccarb, sli calc.
					SANDSTONE: med dk gry, med gry, occ olv gry, vf-f qtz gr, hyal, tmssl, sbang-sbrnd, wl srtld, scs arg mtrx, calc cmt, mod consol-mod fri, loc li, w/dk mnrls, p vis por. N.O.S.
					SAND: wh, vf-f, tr m qtz gr, hyal, tmssl, sbang-sbrnd, wl srtld.
					CLAYSTONE: med dk gry, loc olv gry, occ olv blk, ea, sbbkly-bkly, mod frm, loc sft, sli slty, loc sol i/p, micmic, miccarb, sli calc.
					CLAYSTONE: med dk gry, olv gry, occ dk gnsh gry, ea, blkly-sbbkly, occ sblam-sbtbl, frm-mod frm, loc slty, w/coal incl, micmic, miccarb, v sli calc-n calc.
					SAND: wh, 70% vf-f, 30% m qtz gr, hyal, tmssl, sbang-sbrnd, wl srtld.
					SANDSTONE: med gry, med lt gry, vf-f qtz gr, hyal, ang-sbang, wl srtld, arg mtrx, calc cmt, fri-mod fri, p vis por. N.O.S.
					CLAYSTONE: olv gry, med dk gry, occ dk gry, ea, blkly-sbbkly, amor, mod frm-frm, slty i/p, micmic, miccarb, sli calc.
					SILTSTONE: olv gry, med dk gry, ea, sbbkly-bkly, frm, micmic, miccarb, grad vf sst, sli calc-calc.
					SILTSTONE: med dk gry, med gry, occ olv gry, ea, blkly-sbbkly, frm, micmic, v miccarb, grad vf sst, sli calc.
CENOZOIC	TERTIARY	Eocene	CHACRA	913.0	CLAYSTONE: olv gry, med dk gry, occ dk gry, ea, blkly, amor, frm, slty i/p, micmic, miccarb, n calc.
					SILTSTONE: olv gry, med dk gry, ea, sbbkly-bkly, frm, micmic, miccarb, grad vf sst, sli calc-calc.
					CLAYSTONE: med dk gry, med gry, occ olv gry, ea, blkly-sbbkly, occ sbtab, sblam, frm, loc slty, micmic, miccarb, n calc.
					SILTSTONE: med dk gry, med gry, occ olv gry, ea, blkly-sbbkly, frm, micmic, v miccarb, grad vf sst, sli calc.
					CLAYSTONE: med dk gry, loc olv gry, med gry, occ dk gry, ea, blkly-sbbkly, sbtab i/p, occ sblam, mod frm-mod sft, occ slty, micmic, miccarb, sli calc.
					CLAYSTONE: med dk gry, loc med gry, occ dk gry, ea, blkly-sbbkly, occ sbtab, loc sblam, frm, loc slty, micmic, loc miccarb, sli calc, v occ calc.
					SANDSTONE: olv gry, loc lt olv gry, vf-f qtz gr, hyal, sbang-sbrnd, wl srtld, arg mtrx, scs calc cmt, mod fri-mod consol, drty, loc w/dk mnrls & glau abd incl, p vis por.
					SAND: wh, 90% f, 10% m qtz gr, hyal, tmssl, sbang-sbrnd, wl srtld, loc w/dk lit.
					CLAYSTONE: med dk gry, med gry, ea, blkly-sbbkly, amor, occ sbtab, mod frm-frm, occ slty, micmic, miccarb, n calc-sli calc.
					SANDSTONE: lt gry, med lt gry, occ v lt gry, vf-f qtz gr, hyal, sbang-sbrnd, wl srtld, arg mtrx, scs calc cmt, fri-mod fri, f vis por.
CENOZOIC	TERTIARY	Eocene	RIO BRAVO	1299.9	SAND: wh, vf-f, tr m qtz gr, hyal, tmssl, sbang-sbrnd, wl srtld, loc w/dk lit.
					Fluorescence: 5450'-5550'; NVOS, tr-15% pin point pl yelsh nat fluor, slw, wk, fnt, even, yelsh wh cut fluor, mky wh res ring under U. V. It, n res ring at nat lt. POS.
					SANDSTONE: lt gry, loc med lt gry, v lt gry, vf-f qtz gr, hyal, sbang-sbrnd, wl srtld, scs arg mtrx, calc cmt, mod fri, loc w/glau & shell frag incl, fr vis por.
					SAND: wh, 60% m, 40% f, tr crs qtz gr, hyal, tmssl, sbang-sbrnd, fr srtld.
					Fluorescence: 6250'-6310'; NVOS, 10%-40% pin point pl yelsh nat fluor, slw, wk, fnt, even, yelsh wh cut fluor, mky wh res ring under U. V. It, n res ring at nat lt. POS.
					CLAYSTONE: med dk gry, med gry, occ dk gry, ea, blkly-sbbkly, occ sbtab, frm -mod frm, slty i/p, micmic, miccarb, n calc.
					SANDSTONE: lt gry, v lt gry, vf-f qtz gr, hyal, sbang-sbrnd, wl srtld, arg mtrx, calc cmt, mod fri, w/dk mnrls & loc calc frag incl, p vis por.
					SAND: wh, 70% f, 30% m qtz gr, hyal, tmssl, sbang-sbrnd, wl srtld.
					Fluorescence: 6910'-6980'; NVOS, 10%-40% pin point pl yelsh nat fluor, slw, wk, fnt, even, yelsh wh cut fluor, mky wh res ring under U. V. It, n res ring at nat lt. P-FOS.
					SILTSTONE: med dk gry, med gry, ea, blkly-sbbkly, frm-mod frm, micmic, miccarb, grad vf sst, sli calc:rls & glau abd incl, p vis por.
CENOZOIC	TERTIARY	Eocene	RIO BRAVO	119.6	SANDSTONE: lt gry, med lt gry, occ v lt gry, vf-f qtz gr, hyal, sbang-sbrnd, wl srtld, scs arg mtrx, calc cmt, fri-mod fri, w/dk mnrls incl, p vis por.
					SAND: wh, vf-f, tr m qtz gr, hyal, tmssl, sbang-sbrnd, wl srtld.
					CLAYSTONE: med dk gry, loc dk gry, occ olv gry, brnsh gry, ea, blkly-sbbkly, amor, occ sbtab-sblam, frm-mod frm, slty i/p, micmic, miccarb, n calc.
					CLAYSTONE: med dk gry, loc dk gry, occ olv gry, brnsh gry, ea, blkly-sbbkly, amor, occ sbtab-sblam, frm-mod frm, slty i/p, micmic, miccarb, n calc.
					CLAYSTONE: med dk gry, med gry, loc dk gry, occ olv gry, ea, blkly-sbbkly, amor, occ sbtab-sblam, frm-mod frm, loc slty, micmic, miccarb, n calc.
					CLAYSTONE: med dk gry, loc dk gry, occ olv gry, brnsh gry, ea, blkly-sbbkly, amor, occ sbtab-sblam, frm-mod frm, slty i/p, micmic, miccarb, n calc.
					CLAYSTONE: med dk gry, med gry, loc dk gry, occ olv gry, ea, blkly-sbbkly, amor, occ sbtab-sblam, frm-mod frm, loc slty, micmic, miccarb, n calc.
					CLAYSTONE: med dk gry, loc dk gry, occ olv gry, brnsh gry, ea, blkly-sbbkly, amor, occ sbtab-sblam, frm-mod frm, slty i/p, micmic, miccarb, n calc.
					CLAYSTONE: med dk gry, med gry, loc dk gry, occ olv gry, ea, blkly-sbbkly, amor, occ sbtab-sblam, frm-mod frm, loc slty, micmic, miccarb, n calc.
					CLAYSTONE: med dk gry, loc dk gry, occ olv gry, brnsh gry, ea, blkly-sbbkly, amor, occ sbtab-sblam, frm-mod frm, slty i/p, micmic, miccarb, n calc.
TOTAL DEPTH: 7668.0 ft. MD (RT), 4687.92 ft. TVD (RT)					



STRATIGRAPHIC SEQUENCE

WELL: LO6-31D

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 and Rio Bravo Shaly of Tertiary age.

TGT LAB started logging into Talara Formation at 505 feet to the total depth on Rio Bravo at 7668 feet MD.

CENOZOIC

TERTIARY

TALARA FORMATION

Interval: 0 to 3125 feet

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

Claystone: olive black, locally medium dark gray, olive gray, earthy, blocky to subblocky, occasionally amorphous, moderately soft to moderately firm, micromicaceous, microcarbonaceous, slightly calcareous.

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

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

In the middle section the lithology was conformed mainly by Claystone intercalated with small lens of Sandstone.

Claystone: medium dark gray, olive gray, occasionally dark greenish gray, earthy, subblocky to blocky, locally subtabular, firm to moderately consolidate, very occasionally with pyrite and coal inclusion, micromicaceous, slightly microcarbonaceous, slightly calcareous.

Sandstone: medium light gray, very fine quartz grain, hyaline, angular to subangular, moderately sorted, argillaceous matrix, calcareous cement, consolidate, with dark lithics inclusions, poor visual porosity. No Oil Show.

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

Claystone: olive gray, medium dark gray, occasionally dark gray, earthy, blocky to subblocky, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.



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

Sandstone: medium gray, medium light gray, very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity.

Fluorescence: NVOS, traces to 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. POS.

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

Accessories: Calcite, pyrite, shell fragments, microfossils, coal, dolomite, bentonite.

CHACRA FORMATION

Interval: 3125 to 5088 feet

The lithology in this formation was conformed mainly by Claystone with some intercalations Siltstone and small lens of Limestone.

At the upper section:

Claystone: medium dark gray, medium gray, occasionally olive gray, earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.

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

At the lower section:

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

Limestone: olive gray, occasionally olive black, earthy surface, subblocky, locally sublaminal, locally massive, with coal and pyrite inclusions, moderately hard.

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

RIO BRAVO FORMATION

Interval: 5088 to 7489 feet

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



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

Sand: white, 90% very to fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics.

Sandstone: olive gray, locally light olive gray, very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately friable to moderately consolidated, dirty, with dark minerals and glauconite abundant inclusions, poor visual porosity.

Fluorescence: NVOS, traces to 15% pin point pale yellow natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, non residual ring under U. V. light, non residual ring at natural light. POS.

Claystone: medium dark gray, medium gray, earthy, blocky to subblocky, amorphous, occasionally subtabular, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous.

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

Limestone: olive gray, very occasionally light olive gray, earthy, subblocky, amorphous, locally massive, moderately hard.

In the middle section the lithology was conformed mainly by Sandstone, Sand intercalated with Claystone and Siltstone.

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

Sandstone: light gray, locally medium light gray, very light gray, very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with glauconite and shell fragments inclusions, fair visual porosity.

Fluorescence: NVOS, traces to 40% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.

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

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

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

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

Sandstone: light gray, locally very light gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals and calcareous fragments inclusion, fair visual porosity.

Fluorescence: NVOS, 10-40% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.

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

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

Accessories: calcite, glauconite, pyrite, microfossils, bentonite, slickenside, shell fragments, dolomite, coal.

RIO BRAVO SHALY

Interval: 7489 to 7668 feet

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

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

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

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

Accessories: calcite, coal, dolomite, pyrite.

LITHOLOGICAL DESCRIPTION

WELL: LO6-31D

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
Started logging & Monitoring Data from 505 feet on May 24th, 2013 In Talara Formation.			
505 – 530	40	CLAYSTONE: olive black (5Y 2/1), locally medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally amorphous, moderately soft to moderately firm, micromicaceous, microcarbonaceous, slightly calcareous.	
	40	SANDSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals, poor visual porosity. No Oil Show.	
	20	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, shell fragments, pyrite. NOTE: SAMPLE CONTAMINATED WITH CEMENT.	
530 – 560	40	CLAYSTONE: olive black (5Y 2/1), locally medium dark gray (N4), olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally amorphous, moderately soft to moderately firm, micromicaceous, microcarbonaceous, slightly calcareous.	
	40	SANDSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals, poor visual porosity. No Oil Show.	
	20	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite. NOTE: SAMPLE CONTAMINATED WITH CEMENT.	
560 – 590	50	SANDSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals, poor visual porosity. No Oil Show.	
	30	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately soft to moderately firm, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
590 – 620	50	SANDSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals, poor visual porosity. No Oil Show.	
	30	SAND: white (N9), 50% fine, 40% medium, 10% very fine, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	20	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately soft to moderately firm, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite.	
620 – 650	70	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SANDSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite.	
650 – 680	70	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SANDSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally consolidated, locally tight, with dark minerals, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite.	
680 – 710	50	SANDSTONE: medium dark gray (N4), medium gray (N5), occasionally medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally consolidated, locally tight, with dark minerals, poor visual porosity. No Oil Show.	
	30	SAND: white (N9), 50% fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	20	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy, blocky to subblocky,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite.	
710 – 740	40	SANDSTONE: medium dark gray (N4), locally medium gray (N5), occasionally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally consolidated, with dark minerals, poor visual porosity. No Oil Show.	
	40	SAND: white (N9), 40% fine, 40% medium, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics.	
	20	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, coal.	
740 – 770	40	SANDSTONE: medium dark gray (N4), occasionally medium gray (N5), locally greenish gray (5GY 6/1), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, moderately consolidated, locally friable, with dark and green minerals, poor visual porosity. No Oil Show.	
	40	CLAYSTONE: medium dark gray (N4), occasionally olive gray (5Y 4/1), earthy to smooth, subblocky to blocky, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous, very slightly calcareous.	
	20	SAND: white (N9), 90% fine, 10% medium, hyaline, translucent, subangular to subrounded, well sorted, locally with dark and green lithics. Accessories: calcite, coal.	
770 – 800	70	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), occasionally dark greenish gray (5G 4/1), earthy to smooth, subblocky to blocky, firm, micromicaceous, microcarbonaceous, slightly calcareous.	
	30	SANDSTONE: medium dark gray (N4), occasionally medium gray (N5), locally greenish gray (5GY 6/1), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, moderately consolidated, locally friable, with dark and green minerals, poor visual porosity. No Oil Show. Accessories: calcite.	
800 – 830	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), earthy, subblocky to blocky, moderately firm, slightly silty, micromicaceous, microcarbonaceous, slightly calcareous.	
	Tr	SANDSTONE: medium dark gray (N4), occasionally medium gray (N5), locally greenish gray (5GY 6/1), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, moderately consolidated, locally friable, with dark and green minerals, poor visual porosity. No Oil Show. Accessories: calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
830 – 860	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), earthy, subblocky to blocky, moderately firm, slightly silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite.	
860 – 890	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy, subblocky to blocky, moderately firm, locally soft, slightly silty, locally soluble in part, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, coal, microfossils.	
890 – 920	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), very occasionally light olive gray (5Y 6/1), earthy, subblocky to blocky, moderately firm, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, microfossils.	
920 – 950	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), very occasionally light olive gray (5Y 6/1), earthy, subblocky to blocky, moderately firm, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite.	
950 – 980	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), very occasionally light olive gray (5Y 6/1), earthy, subblocky to blocky, moderately firm, micromicaceous, microcarbonaceous, calcareous. Accessories: calcite, dolomite.	
980 – 1010	100 Tr	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), very occasionally light olive gray (5Y 6/1), earthy, subblocky to blocky, moderately firm, micromicaceous, microcarbonaceous, calcareous. SANDSTONE: medium dark gray (N4), locally greenish gray (5GY 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, moderately sorted, argillaceous matrix, calcareous cement, moderately consolidated, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1010 – 1040	100 Tr	CLAYSTONE: medium dark gray (N4), locally dark greenish gray (5GY 4/1), earthy, subblocky to blocky, firm, locally silt in part, micromicaceous, microcarbonaceous, very occasionally with coal and pyrite included, slightly calcareous. SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subrounded, well sorted. Accessories: calcite.	
1040 – 1070	100 Tr	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), very occasionally light olive gray (5Y 6/1), earthy, blocky to subblocky, moderately firm, micromicaceous, microcarbonaceous, with coal and pyrite included, slightly calcareous. SANDSTONE: medium dark gray (N4), locally greenish gray (5GY 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, moderately sorted, argillaceous matrix, calcareous cement, moderately consolidated, poor visual porosity. No Oil Show. Accessories: calcite, microfossils.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, microfossils.	
1070 – 1100	100 Tr	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), very occasionally light olive gray (5Y 6/1), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, calcareous. SANDSTONE: medium dark gray (N4), locally greenish gray (5GY 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, moderately sorted, argillaceous matrix, calcareous cement, moderately consolidated, poor visual porosity. No Oil Show. Accessories: calcite, coal.	
1100 – 1130	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), very occasionally light olive gray (5Y 6/1), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, calcareous. Accessories: calcite, coal.	
1130 – 1160	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), earthy, blocky to subblocky, moderately firm to moderately soft, locally silty, slightly soluble in part, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, coal, dolomite.	
1160 - 1190	100 Tr	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), earthy, blocky to subblocky, moderately firm to moderately soft, locally silty, slightly soluble in part, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, moderately sorted, scarce argillaceous matrix, calcareous cement, moderately friable to friable, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1190 – 1220	100 Tr	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), very occasionally light olive gray (5Y 6/1), earthy, blocky to subblocky, occasionally subtabular, moderately firm to moderately soft, locally silty, slightly soluble in part, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, moderately sorted, scarce argillaceous matrix, calcareous cement, moderately friable to friable, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1220 – 1250	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), very occasionally light olive gray (5Y 6/1), earthy, blocky to subblocky, occasionally subtabular, moderately firm to moderately soft, locally silty, slightly soluble in part, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, dolomite.	
1250 – 1280	100	CLAYSTONE: CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally light olive gray (5Y 6/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, moderately soft in part, locally silty, slightly soluble in part, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous, calcareous. Accessories: calcite, microfossils.	
1280 – 1310	100 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally light olive gray (5Y 6/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, moderately soft in part, locally silty, slightly soluble in part, micromicaceous, microcarbonaceous, calcareous. SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, moderately sorted, scarce argillaceous matrix, calcareous cement, moderately friable to friable, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1310 – 1340	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally light olive gray (5Y 6/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, moderately soft in part, locally silty, slightly soluble in part, micromicaceous, microcarbonaceous, calcareous. Accessories: calcite.	
1340 – 1370	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), locally medium gray (N5), occasionally light olive gray (5Y 6/1), earthy, blocky to subblocky, locally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, calcareous. Accessories: calcite, microfossils.	
1370 – 1400	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), locally medium gray (N5), occasionally light olive gray (5Y 6/1), earthy, blocky to subblocky, locally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, calcareous. Accessories: calcite.	
1400 – 1430	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), locally medium gray (N5), occasionally light olive gray (5Y 6/1), earthy, blocky to subblocky, locally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, calcareous. Accessories: calcite, dolomite.	
1430 – 1460	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, locally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, calcareous. Accessories: calcite, dolomite.	
1460 – 1490	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), very occasionally light olive gray (5Y 6/1), earthy, blocky to subblocky, locally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, calcareous. Accessories: calcite, dolomite.	
1490 – 1520	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), occasionally light olive gray (5Y 6/1), earthy, blocky to subblocky, locally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, calcareous. Accessories: calcite, dolomite.	
1520 – 1550	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1),	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally dark greenish gray (5GY 4/1), earthy, subblocky to blocky, locally sublaminae, firm, very occasionally with pyrite inclusion, micromicaceous, microcarbonaceous, calcareous. Accessories: calcite.	
1550 – 1580	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally subtabular, occasionally sublaminae, firm, locally soluble, very occasionally with pyrite inclusion, micromicaceous, microcarbonaceous, calcareous. Accessories: calcite, dolomite, coal.	
1580 – 1610	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally subtabular, very occasionally sublaminae, firm, slightly soluble, very occasionally with pyrite and coal inclusion, micromicaceous, very microcarbonaceous, calcareous. Accessories: calcite, dolomite.	
1610 – 1640	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally subtabular, firm, slightly soluble, very occasionally with pyrite and coal inclusion, micromicaceous, slightly microcarbonaceous, slightly calcareous. Accessories: calcite, dolomite, microfossils.	
1640 – 1670	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae, firm to moderately consolidate, very occasionally with pyrite and coal inclusion, micromicaceous, slightly microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite, microfossils.	
1670 – 1700	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, subblocky to blocky, locally subtabular, firm to moderately consolidate, very occasionally with pyrite and coal inclusion, micromicaceous, slightly microcarbonaceous, slightly calcareous. Accessories: calcite, dolomite, coal.	
1700 – 1730	100 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally subtabular, occasionally sublaminae, firm to moderately consolidate, silty in part, very occasionally with pyrite and coal inclusion, micromicaceous, microcarbonaceous, slightly calcareous to non calcareous. SANDSTONE: medium light gray (N6), very fine to fine quartz grain, hyaline, angular to subangular, moderately sorted, argillaceous matrix, calcareous cement, consolidate, with dark lithics inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal, bentonite.	
1730 – 1760	90	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, locally silty,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	firm, occasionally moderately consolidate, occasionally with pyrite and coal inclusion, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: medium light gray (N6), very fine quartz grain, hyaline, angular to subangular, moderately sorted, argillaceous matrix, calcareous cement, consolidate, with dark lithics inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal, bentonite.	
1760 – 1790	100 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae, firm, occasionally moderately consolidate, locally silty, occasionally with pyrite and coal inclusion, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: medium light gray (N6), very fine quartz grain, hyaline, angular to subangular, moderately sorted, argillaceous matrix, calcareous cement, consolidate, with dark lithics inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal.	
1790 – 1820	100 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, locally subtabular, firm, occasionally moderately consolidate, occasionally silty occasionally with pyrite and coal inclusion, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: medium light gray (N6), very fine to fine quartz grain, hyaline, angular to subangular, moderately sorted, argillaceous matrix, calcareous cement, consolidate, with dark lithics inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal, pyrite.	
1820 – 1850	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae, occasionally subtabular, firm, occasionally moderately consolidate, occasionally silty, with coal inclusions, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, dolomite, coal, pyrite.	
1850 – 1880	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae, occasionally subtabular, firm, occasionally moderately consolidate, occasionally silty, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite, coal.	
1880 – 1910	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae, occasionally subtabular, firm, occasionally moderately consolidate, locally silty, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite, coal.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
1910 – 1940	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, locally silty, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite, coal.	
1940 – 1970	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, locally silty, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite, coal.	
1970 – 2000	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, locally silty, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite.	
2000 – 2030	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, locally silty, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite.	
2030 – 2060	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, locally silty, with coal inclusions, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, dolomite, coal.	
2060 – 2090	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, locally silty, with coal inclusions, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, dolomite.	
2090 – 2120	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, silty in part, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite, microfossils.	
2120 – 2150	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, silty in part, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite, coal.	
2150 – 2180	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1),	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, silty in part, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite, coal.	
2180 – 2210	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, silty in part, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite, coal.	
2210 – 2240	100 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, silty in part, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, consolidate, with dark lithic inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal.	
2240 – 2270	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, silty in part, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite, coal.	
2270 – 2300	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, silty in part, with coal inclusions, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous. Accessories: calcite, dolomite, coal.	
2300 – 2330	80 20 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally sublaminae to subtabular, firm to moderately firm, silty in part, with coal inclusions, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
2330 – 2360	80	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
2360 – 2390	90 10 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, with coal inclusions, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 80% very fine to fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
2390 – 2420	100 Tr Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous firm to moderately firm, silty in part, with coal inclusions, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity. No Oil Show. Accessories: calcite.	
2420 – 2450	100 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity. No Oil Show. Accessories: calcite.	
2450 – 2480	100 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, amorphous, blocky to subblocky, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity. No Oil Show. Accessories: calcite.	
2480 – 2510	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, dolomite.	
2510 – 2520	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, dolomite.	
2520 – 2540	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. NOTE: SAMPLE CONTAMINATED WITH 20% CHEMICAL AND SHAVING METALS. Accessories: calcite, dolomite.	
2540 – 2570	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. NOTE: SAMPLE CONTAMINATED WITH 20% CHEMICAL AND SHAVING METALS. Accessories: calcite, dolomite.	
2570 – 2600	100	CLAYSTONE: medium dark gray (N4), dark gray (N3), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. NOTE: SAMPLE CONTAMINATED WITH 10% CHEMICAL AND SHAVING METALS. Accessories: calcite, dolomite.	
2600 – 2630	100	CLAYSTONE: medium dark gray (N4), dark gray (N3), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. NOTE: SAMPLE CONTAMINATED WITH 10% CHEMICAL AND SHAVING METALS. Accessories: calcite, dolomite.	
2630 – 2660	100	CLAYSTONE: medium dark gray (N4), dark gray (N3), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. NOTE: SAMPLE CONTAMINATED WITH 10% CHEMICAL AND SHAVING METALS. Accessories: calcite, dolomite.	
2660 – 2690	70	CLAYSTONE: medium dark gray (N4), dark gray (N3), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	SAND: white (N9), very fine to fine, traces 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, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity. Fluorescence: NVOS, 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. POS. Accessories: calcite, coal.	
2690 – 2720	60	SAND: white (N9), 70% very fine to fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	10
	30	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity. Fluorescence: NVOS, 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. POS. Accessories: calcite, coal.	
2720 – 2750	70	CLAYSTONE: medium dark gray (N4), dark gray (N3), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SAND: white (N9), 80% very fine to 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, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity. No Oil Show. Accessories: calcite, coal.	
2750 – 2780	100	CLAYSTONE: medium dark gray (N4), dark gray (N3), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous..	
	Tr	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity. No Oil Show. Accessories: calcite.	
2780 – 2810	100	CLAYSTONE: medium dark gray (N4), dark gray (N3), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally moderately soft, silty in	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	part, micromicaceous, microcarbonaceous, non calcareous.. SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
2810 – 2840	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, dolomite.	
2840 – 2870	60	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	20	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, poor visual porosity. No Oil Show. Accessories: calcite.	
2870 – 2900	70	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, angular to subangular, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, poor visual porosity. No Oil Show. NOTE: SAMPLE CONTAMINATED WITH CHEMICAL. Accessories: calcite.	
2900 – 2930	90	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), 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), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
2930 – 2960	90	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite.	
2960 – 2990	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous slightly calcareous.	
	Tr	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, blocky to subblocky, locally amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite.	
2990 – 3020	100	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, occasionally subtabular, very firm to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous to calcareous.	
	Tr	SAND: white (N9), fine to very fine quartz grain, smoky, occasionally hyaline, translucent, subangular, well sorted. Accessories: calcite, coal, microfossils.	
3020 – 3050	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, occasionally subtabular, very occasionally subplaty, moderately firm to firm, silty in part, with glauconite inclusion, micromicaceous, microcarbonaceous, slightly calcareous to non calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous to calcareous. Accessories: calcite, coal, glauconite.	
3050 – 3080	80	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, occasionally subtabular, locally subplaty to platy, moderately firm to firm, silty in part, with glauconite inclusion, very micromicaceous, microcarbonaceous, very slightly calcareous to slightly calcareous.	
	20	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, micromicaceous, occasionally very microcarbonaceous, grading to very fine sandstone, slightly calcareous to calcareous. Accessories: calcite, coal.	
3080 – 3110	70	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, subblocky to blocky, very occasionally subplaty, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to very slightly calcareous.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, micromicaceous, occasionally very microcarbonaceous, grading to very fine sandstone, slightly calcareous to calcareous.	
	10	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellow natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, no residual ring under U. V. light, non residual ring at natural light. POS. Accessories: calcite, coal, dolomite.	
CHACRA FM. TOP. AT 3125.00 ft. MD (RT); 2355.83 ft. TVD (RT)			
3110 – 3140	80	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, subblocky to blocky, very occasionally subplaty, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to very slightly calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, micromicaceous, occasionally very microcarbonaceous, grading to very fine sandstone, slightly calcareous to calcareous.	
	10	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, coal, dolomite.	
3140 – 3170	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, subblocky to blocky, very occasionally subplaty, firm, silty in part, with glauconite inclusions in part, micromicaceous, microcarbonaceous, slightly to very slightly calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, micromicaceous, occasionally very microcarbonaceous, grading to very fine sandstone, slightly calcareous to calcareous. Accessories: calcite, coal.	
3170 – 3200	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, subblocky to blocky, very occasionally subplaty, firm, silty in part, with coal inclusions in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, with coal inclusions, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous to calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, smoky, subangular to subrounded, fair sorted, argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with dark minerals inclusion, poor visual porosity, No Oil Show. Accessories: calcite, coal, glauconite.	
3200 – 3230	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, very occasionally subplaty, firm, silty in part, with coal inclusions in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, with coal inclusions, micromicaceous, very microcarbonaceous, grading to very fine sandstone, calcareous.	
	Tr	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, smoky, subangular to subrounded, fair sorted, argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with dark minerals inclusion, poor visual porosity, No Oil Show.	
	Tr	SAND: white (N9), fine to very fine quartz grain, smoky, occasionally hyaline, occasionally milky, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal, dolomite. NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.	
3230 – 3260	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, occasionally subtabular, firm, silty in part, with coal inclusions in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, with coal inclusions, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, smoky, subangular to subrounded, fair sorted, argillaceous matrix, calcareous cement, occasionally argillaceous cement, consolidate, locally with dark minerals inclusion, poor visual porosity, No Oil Show. Accessories: calcite, coal.	
3260 – 3290	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, occasionally subtabular, firm, silty in part, with coal inclusions in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, with coal inclusions, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, coal.	
3290 – 3320	100	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, occasionally subtabular, firm, silty in part, with coal inclusions in part, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	microcarbonaceous, non calcareous. SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, with coal inclusions, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, smoky, subangular to subrounded, fair sorted, argillaceous matrix, calcareous cement, occasionally argillaceous cement, consolidate, locally with dark minerals inclusion, poor visual porosity, No Oil Show. Accessories: calcite, coal, glauconite.	
3320 – 3350	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, very occasionally subplaty, firm, silty in part, with coal inclusions in part, micromicaceous, microcarbonaceous, very slightly calcareous to non calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm to moderately firm, with coal inclusions, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, coal.	
3350 – 3380	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, very occasionally subplaty, firm, silty in part, with coal inclusions in part, micromicaceous, microcarbonaceous, very slightly calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, with coal inclusions, micromicaceous, very microcarbonaceous, grading to very fine sandstone, calcareous. Accessories: calcite, coal.	
3380 – 3410	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, occasionally subtabular, moderately firm to firm, silty in part, with coal inclusions in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, with coal inclusions, micromicaceous, microcarbonaceous, grading to very fine sandstone, calcareous. Accessories: calcite, coal.	
3410 – 3440	80	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, occasionally subtabular, moderately firm to firm, silty in part, with coal inclusions in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, smoky, subangular to angular, fair sorted, argillaceous matrix, calcareous cement, consolidate, locally with dark minerals inclusion, poor visual porosity, No Oil Show.	
	Tr	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, with coal inclusions, micromicaceous, microcarbonaceous, grading to very fine sandstone, calcareous. Accessories: calcite, coal.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
3440 – 3470	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, occasionally subtabular, moderately firm to firm, silty in part, with coal inclusions in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, with coal inclusions, micromicaceous, microcarbonaceous, grading to very fine sandstone, calcareous.	
	Tr	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, smoky, subangular to angular, fair sorted, argillaceous matrix, calcareous cement, consolidate, locally with dark minerals inclusion, poor visual porosity, No Oil Show. Accessories: calcite, coal.	
3470 – 3500	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, occasionally subtabular, moderately firm to firm, silty in part, with coal inclusions in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, with coal inclusions, micromicaceous, microcarbonaceous, grading to very fine sandstone, calcareous. Accessories: calcite, dolomite.	
3500 – 3530	90	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), earthy, blocky, occasionally subtabular, moderately firm to firm, silty in part, with coal inclusions in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, with coal inclusions, micromicaceous, microcarbonaceous, grading to very fine sandstone, calcareous. Accessories: calcite, dolomite.	
3530 – 3560	100	CLAYSTONE: olive gray (5Y 4/1), locally medium dark gray (N4), occasionally dark gray (N3), brownish gray (5YR 4/1), earthy, blocky to subblocky, occasionally subtabular, moderately firm to firm, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: olive gray (5Y 4/1), medium dark gray (N4), earthy, subblocky to blocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, calcareous. Accessories: calcite, dolomite, limestone, pyrite.	
3560 – 3590	90	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark gray (N3), brownish gray (5YR 4/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), earthy, locally medium gray (N5), blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, calcareous. Accessories: calcite, dolomite, pyrite.	
3590 – 3620	80	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark gray (N3), brownish gray (5YR 4/1), earthy, blocky	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 Tr	to subblocky, occasionally subtabular, firm to moderately firm, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, calcareous. SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, smoky, subangular to angular, fair sorted, argillaceous matrix, calcareous cement, consolidate, locally with dark minerals inclusion, poor visual porosity, No Oil Show Accessories: calcite, dolomite, coal.	
3620 – 3650	90	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally dark gray (N3), brownish gray (5YR 4/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, calcareous.	
	Tr	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to angular, well sorted, argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusion, poor visual porosity, No Oil Show Accessories: calcite, dolomite, coal.	
3650 – 3680	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, 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, subangular to angular, well sorted, argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusion, poor visual porosity, No Oil Show Accessories: calcite, dolomite, coal, pyrite.	
3680 – 3710	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, dolomite, limestone, coal.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
3710 – 3740	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, firm, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, subblocky to blocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, dolomite, limestone, microfossils.	
3740 – 3770	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, firm, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, dolomite, microfossils, limestone.	
3770 – 3800	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, firm, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, dolomite, pyrite.	
3800 – 3830	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, sublaminae, firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, very slightly calcareous. Accessories: dolomite, calcite, pyrite.	
3830 – 3860	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, sublaminae, firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, very slightly calcareous.	
	Tr	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to angular, well sorted, argillaceous matrix, calcareous cement, friable, locally moderately consolidated, locally with dark minerals inclusion, poor visual porosity, No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: dolomite, calcite, pyrite.	
3860 – 3890	100 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, sublaminal, firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, very slightly calcareous. Accessories: dolomite, calcite, pyrite.	
3890 – 3920	100 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, occasionally subtabular to sublaminal, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, very slightly calcareous. Accessories: dolomite, calcite, pyrite.	
3920 – 3950	100 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, occasionally subtabular to sublaminal, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, very slightly calcareous. Accessories: dolomite, calcite, pyrite.	
3950 – 3980	100 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, occasionally subtabular to sublaminal, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), locally medium gray (N5), earthy, blocky to subblocky, firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, very slightly calcareous. Accessories: dolomite, calcite.	
3980 – 4010	90 10	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, occasionally subtabular to sublaminal, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, firm, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: dolomite, calcite.	
4010 – 4040	80	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	occasionally subtabular to sublaminar, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, firm, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, glauconite.	
4040 – 4070	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminar, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, firm, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, dolomite.	
4070 – 4100	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminar, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, firm, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite.	
4100 – 4130	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminar, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, firm, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, limestone, microfossils.	
4130 – 4160	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminar, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, firm, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, limestone, dolomite, microfossils.	
4160 – 4190	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminar, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, microfossils.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
4190 – 4220	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, sublaminae, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, very slightly calcareous. Accessories: calcite, dolomite, limestone, microfossils.	
4220 – 4250	100 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, sublaminae, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, slightly calcareous. SILTSTONE: medium dark gray (N4), olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, dolomite, limestone, microfossils.	
4250 – 4280	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, sublaminae, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: limestone, dolomite, calcite, microfossils.	
4280 – 4310	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, subtabular in part, occasionally sublaminae, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: dolomite, calcite, limestone, microfossils.	
4310 – 4340	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, subtabular in part, occasionally sublaminae, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, limestone, microfossils.	
4340 – 4370	100	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, subtabular in part, occasionally sublaminae, moderately firm to moderately soft, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, limestone, microfossils.	
4370 – 4400	100 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, subtabular in part, occasionally sublaminae, moderately firm to moderately soft, slightly soluble, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, microfossils, limestone.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
4400 – 4430	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, subtabular in part, occasionally sublaminae, moderately firm to moderately soft, slightly soluble, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, limestone, microfossils.	
4430 – 4460	100 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), dark gray (N3), very occasionally grayish black (N2), earthy, blocky to subblocky, subtabular in part, occasionally sublaminae, moderately firm to moderately soft, slightly soluble, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, firm, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, limestone, microfossils.	
4460 – 4490	100 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), very occasionally grayish black (N2), earthy, blocky to subblocky, subtabular in part, occasionally sublaminae, moderately firm to moderately soft, slightly soluble, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, firm, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, microfossils, limestone.	
4490 – 4500	100 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), very occasionally grayish black (N2), earthy, blocky to subblocky, subtabular in part, occasionally sublaminae, moderately firm to moderately soft, slightly soluble, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, very microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: microfossils, calcite, limestone, pyrite.	
4500 – 4510	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), very occasionally grayish black (N2), earthy, blocky to subblocky, subtabular in part, occasionally sublaminae, moderately firm to moderately soft, slightly soluble, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: microfossils, calcite, limestone.	
5410 – 4520	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, subtabular in part, occasionally sublaminae, firm to moderately firm, locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		moderately soft, slightly soluble, locally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: microfossils, calcite, limestone.	
4520 – 4530	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, locally soft, slightly soluble, locally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: microfossils, dolomite, pyrite, calcite, limestone.	
4530 – 4540	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky, occasionally subblocky, locally subtabular, firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous, locally calcareous. Accessories: microfossils, coal, calcite, limestone.	
4540 – 4550	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, occasionally sublaminal, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous, locally calcareous. Accessories: calcite, limestone.	
4550 – 4560	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, occasionally sublaminal, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous, locally calcareous. Accessories: calcite, limestone.	
4560 – 4570	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, occasionally sublaminal, moderately firm to firm, silty, micromicaceous, microcarbonaceous, slightly calcareous, locally calcareous. Accessories: calcite, limestone.	
4570 – 4580	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, slightly soluble, silty, micromicaceous, microcarbonaceous, slightly calcareous to calcareous. Accessories: coal, calcite, limestone.	
4580 – 4590	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, slightly soluble, silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: coal, calcite, limestone.	
4590 – 4600	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, locally subtabular, occasionally sublaminal, moderately firm to firm, moderately soft, slightly soluble, silty, micromicaceous, microcarbonaceous, slightly calcareous to calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, limestone.	
4600 – 4610	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, locally sublaminae, moderately firm to firm, slightly soluble, silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: coal, dolomite, calcite, limestone.	
4610 – 4620	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, locally sublaminae, moderately firm to soft, locally firm, silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: coal, dolomite, calcite, microfossils.	
4620 – 4630	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, locally sublaminae, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: coal, dolomite, calcite.	
4630 – 4640	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, locally subtabular, firm, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: coal, dolomite, calcite.	
4640 – 4650	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, locally sublaminae, locally subtabular, firm, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: dolomite, calcite.	
4650 – 4660	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, locally subtabular, occasionally sublaminae, moderately firm, occasionally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: coal, dolomite, calcite.	
4660 – 4670	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, locally subtabular, occasionally sublaminae, moderately firm, occasionally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: coal, dolomite, calcite, glauconite.	
4670 – 4680	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, occasionally subtabular, moderately firm to firm, occasionally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: coal, dolomite, calcite, limestone.	
4680 – 4690	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, locally subtabular, occasionally sublaminae, moderately firm, occasionally firm, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: coal, limestone, calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
4690 – 4700	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, locally subtabular, moderately firm, occasionally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: coal, dolomite, calcite, glauconite.	
4700 – 4710	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, locally subtabular, occasionally sublaminae, moderately firm, occasionally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: coal, dolomite, calcite, limestone.	
4710 – 4720	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, firm, occasionally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: coal, calcite, limestone.	
4720 – 4730	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, firm, occasionally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: coal, dolomite, calcite, limestone.	
4730 – 4740	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, occasionally subtabular, occasionally sublaminae, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: calcite, limestone, microfossils.	
4740 – 4750	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, locally subtabular, occasionally sublaminae, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: calcite, coal, dolomite.	
4750 – 4760	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, occasionally subtabular, locally sublaminae, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: calcite, coal, dolomite.	
4760 – 4770	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, locally subtabular, occasionally sublaminae, firm to moderately firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, occasionally calcareous. Accessories: calcite, coal, dolomite.	
4770 – 4780	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, locally subtabular, occasionally sublaminae, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, coal, dolomite.	
4780 – 4790	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5),	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally dark gray (N3), earthy, subblocky to blocky, locally subtabular, occasionally sublaminae, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: calcite, dolomite, microfossils, pyrite.	
4790 – 4800	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky, subblocky to blocky, locally subtabular, occasionally sublaminae, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: calcite, dolomite, pyrite.	
4800 – 4810	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: calcite, coal, dolomite, microfossils.	
4810 – 4820	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, firm to moderately firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous to calcareous. Accessories: calcite, coal, dolomite.	
4820 – 4830	90 10	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. LIMESTONE: olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy surface, subblocky, locally sublaminae, locally massive, with coal and pyrite inclusions, moderately hard. Accessories: calcite, coal, microfossils.	
4830 – 4840	90 10	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. LIMESTONE: olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy surface, subblocky, locally sublaminae, locally massive, with coal and pyrite inclusions, moderately hard. Accessories: calcite, coal, microfossils.	
4840 – 4850	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, locally sublaminae, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: calcite, coal, limestone.	
4850 – 4860	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky, locally subtabular, locally sublaminae, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous. Accessories: calcite, coal, limestone.	
4860 – 4870	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky, locally subtabular, locally sublaminae, firm, locally silty, micromicaceous, locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous, slightly calcareous. Accessories: calcite, coal, limestone.	
4870 – 4880	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, subblocky, occasionally subtabular, locally sublaminal, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, locally calcareous. Accessories: calcite, coal.	
4880 – 4890	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, locally sublaminal, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, locally calcareous. Accessories: calcite, coal.	
4890 – 4900	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous to calcareous. Accessories: calcite, dolomite.	
4900 – 4910	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous to calcareous. Accessories: calcite, dolomite.	
4910 – 4920	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous to calcareous. Accessories: calcite, coal, microfossils.	
4920 – 4930	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, locally sublaminal, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, coal, microfossils.	
4930 – 4940	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, locally sublaminal, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, coal, dolomite.	
4940 – 4950	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, locally sublaminal, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, coal, microfossils.	
4950 – 4960	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally subtabular, locally sublaminar, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, coal, dolomite, microfossils.	
4960 – 4970	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, locally sublaminar, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, microfossils.	
4970 – 4980	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, locally sublaminar, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, microfossils.	
4980 – 4990	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, locally sublaminar, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, microfossils.	
4990 – 5000	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, locally sublaminar, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, microfossils.	
5000 – 5010	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, locally sublaminar, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, microfossils.	
5010 – 5020	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, locally sublaminar, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, microfossils.	
5020 – 5030	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, locally sublaminar, firm, locally silty, micromicaceous, locally microcarbonaceous, slightly calcareous, very occasionally calcareous. Accessories: calcite, microfossils.	
5030 – 5040	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous, slightly calcareous. Accessories: calcite, microfossils, dolomite.	
5040 – 5050	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, microfossils, dolomite.	
5050 – 5060	100	CLAYSTONE: medium dark gray (N4), locally medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: calcite, microfossils, dolomite, limestone.	
5060 – 5070	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: microfossils, calcite, limestone.	
5070 – 5080	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: microfossils, limestone, calcite.	
RIO BRAVO FM. TOP. AT 5087.00 ft. MD (RT); 3268.36 ft. TVD (RT)			
5080 – 5090	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, with glauconite inclusions, slightly calcareous. Accessories: glauconite microfossils, limestone, calcite.	
5090 – 5100	40 30 30	SANDSTONE: olive gray (5Y 4/1), locally light olive gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, dirty, locally with dark minerals and glauconite abundant inclusions, poor visual porosity. SAND: white (N9), 90% very to fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, non residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, with glauconite inclusions, slightly calcareous. Accessories: abundant glauconite, calcite, pyrite.	5
5100 – 5110	50	SANDSTONE: olive gray (5Y 4/1), locally light olive gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement,	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	moderately friable to moderately consolidated, dirty, with dark minerals and glauconite abundant inclusions, poor visual porosity. Fluorescence: NVOS, 5% to traces pin point pale yellow natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, non residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, with glauconite inclusions, slightly calcareous.	
	20	SAND: white (N9), 90% very to fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: abundant glauconite, calcite, pyrite.	
5110 – 5120	50	SANDSTONE: olive gray (5Y 4/1), locally light olive gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately friable to moderately consolidated, dirty, with dark minerals and glauconite abundant inclusions, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, non residual ring under U. V. light, non residual ring at natural light. POS.	5
	30	SAND: white (N9), 90% very to fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics.	
	20	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, subblocky to blocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, with glauconite inclusions, slightly calcareous. Accessories: abundant glauconite, calcite, pyrite.	
5120 – 5130	50	SANDSTONE: olive gray (5Y 4/1), locally light olive gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately friable to moderately consolidated, dirty, with dark minerals and glauconite abundant inclusions, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, non residual ring under U. V. light, non residual ring at natural light. POS.	5
	30	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SAND: white (N9), very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: abundant glauconite, calcite, pyrite.	
5130 – 5140	50	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky,	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	40	amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: olive gray (5Y 4/1), light olive gray (5Y 6/1), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately friable to moderately consolidated, dirty, with dark minerals and glauconite abundant inclusions, poor visual porosity.	
	10	SAND: white (N9), 90% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, non residual ring under U. V. light, non residual ring at natural light. POS. Accessories: abundant glauconite, calcite, pyrite.	
5140 – 5150	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	40	SANDSTONE: olive gray (5Y 4/1), light olive gray (5Y 6/1), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately friable to moderately consolidated, dirty, with dark minerals and glauconite abundant inclusions, poor visual porosity.	
	Tr	SAND: white (N9), 90% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, non residual ring under U. V. light, non residual ring at natural light. POS. Accessories: abundant glauconite, calcite, pyrite.	5
5150 – 5160	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SANDSTONE: olive gray (5Y 4/1), light olive gray (5Y 6/1), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately friable to moderately consolidated, dirty, with dark minerals and glauconite abundant inclusions, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellow natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, non residual ring under U. V. light, non residual ring at natural light. POS. NOTE: SAMPLE CONTAMINATED WITH CaCO₃ 30%. Accessories: abundant glauconite, calcite, pyrite.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
5160 – 5170	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	TR
	10	SANDSTONE: olive gray (5Y 4/1), light olive gray (5Y 6/1), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately friable to moderately consolidated, dirty, with dark minerals and glauconite abundant inclusions, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellow natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, non residual ring under U. V. light, non residual ring at natural light. POS. Accessories: abundant glauconite, calcite, pyrite.	
5170 – 5180	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	TR
	10	SANDSTONE: olive gray (5Y 4/1), light olive gray (5Y 6/1), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately friable to moderately consolidated, dirty, with dark minerals and glauconite abundant inclusions, poor visual porosity.	
	Tr	SAND: white (N9), 90% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Fluorescence: NVOS, traces pin point pale yellow natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, non residual ring under U. V. light, non residual ring at natural light. POS. Accessories: abundant glauconite, calcite, pyrite.	
5180 – 5190	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	SANDSTONE: olive gray (5Y 4/1), light olive gray (5Y 6/1), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately consolidated to friable, dirty, locally tight, with dark minerals and glauconite abundant inclusions, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. NOTE: SAMPLE CONTAMINATED WITH CaCO₃ 10%. Accessories: glauconite, calcite, pyrite.	
5190 – 5200	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: olive gray (5Y 4/1), light olive gray (5Y 6/1), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately consolidated to friable, dirty, locally tight, with dark minerals and glauconite abundant inclusions, poor visual porosity. No Oil Show. NOTE: SAMPLE CONTAMINATED WITH CaCO₃ 30%. Accessories: glauconite, calcite, pyrite.	
5200 – 5210	100 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: olive gray (5Y 4/1), light olive gray (5Y 6/1), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately consolidated to friable, dirty, locally tight, with dark minerals and glauconite abundant inclusions, poor visual porosity. No Oil Show. NOTE: SAMPLE CONTAMINATED WITH CaCO₃ 10%. Accessories: glauconite, calcite, pyrite.	
5210 – 5220	100 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: olive gray (5Y 4/1), light olive gray (5Y 6/1), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately consolidated to friable, dirty, locally tight, with dark minerals and glauconite abundant inclusions, poor visual porosity. No Oil Show. NOTE: SAMPLE CONTAMINATED WITH CaCO₃ 10%. Accessories: calcite, pyrite.	
5220 – 5230	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
5230 – 5240	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
5240 – 5250	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: pyrite, calcite, limestone.	
5250 – 5260	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		amorphous, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, limestone, pyrite.	
5260 – 5270	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite, microfossils.	
5270 – 5280	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. Accessories: calcite, pyrite, microfossils.	
5280 – 5290	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. Accessories: calcite, pyrite, microfossils.	
5290 – 5300	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. Accessories: calcite, pyrite, microfossils.	
5300 – 5310	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, occasionally subtabular, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. Accessories: abundant bentonite, calcite, pyrite, microfossils.	
5310 – 5320	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, occasionally subtabular, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. Accessories: abundant bentonite, microfossils, calcite, pyrite.	
5320 – 5330	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, occasionally subtabular, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. Accessories: abundant bentonite, microfossils, calcite, pyrite.	
5330- 5340	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, occasionally subtabular, moderately firm to firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. Accessories: bentonite, glauconite, microfossils, calcite, pyrite.	
5340 – 5350	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, occasionally subtabular, moderately firm to firm, occasionally silty, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	microcarbonaceous, non calcareous to slightly calcareous. SANDSTONE: olive gray (5Y 4/1), light olive gray (5Y 6/1), locally medium dark gray (N4), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately consolidated to friable, dirty, locally tight, with dark minerals and glauconite abundant inclusions, poor visual porosity. No Oil Show. Accessories: bentonite, glauconite, microfossils, calcite, pyrite.	
5350 – 5360	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: bentonite, microfossils, calcite, pyrite.	
5360 – 5370	100	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, occasionally with glauconite inclusions, slightly calcareous. Accessories: glauconite, calcite, pyrite, limestone.	
5370 – 5380	100 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, occasionally with glauconite inclusions, slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: microfossils, pyrite, calcite glauconite.	
5380 – 5390	90 10	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, occasionally with glauconite inclusions, slightly calcareous. LIMESTONE: olive gray (5Y 4/1), very occasionally light olive gray (5Y 6/1), earthy, subblocky, amorphous, locally massive, moderately hard. Accessories: limestone, pyrite, microfossils, calcite.	
5390 – 5400	90 10	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, occasionally with glauconite inclusions, slightly calcareous. LIMESTONE: olive gray (5Y 4/1), very occasionally light olive gray (5Y 6/1), earthy, subblocky, amorphous, locally massive, moderately hard. Accessories: pyrite, calcite, microfossils.	
5400 – 5410	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. LIMESTONE: olive gray (5Y 4/1), very occasionally light (5Y 6/1), earthy surface, subblocky, amorphous, locally massive, moderately hard. Accessories: pyrite, calcite.	
5410 – 5420	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	LIMESTONE: olive gray (5Y 4/1), very occasionally light (5Y 6/1), earthy surface, subblocky, amorphous, locally massive, moderately hard. Accessories: pyrite, calcite.	
5420 – 5430	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	LIMESTONE: olive gray (5Y 4/1), very occasionally light (5Y 6/1), earthy surface, subblocky, amorphous, locally massive, moderately hard. Accessories: pyrite, calcite.	
5430 – 5440	50	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	40	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics.	
	10	SANDSTONE: olive gray (5Y 4/1), medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, dirty in part, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	
5440 – 5450	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics.	
	10	SANDSTONE: olive gray (5Y 4/1), medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, dirty in part, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	
5450 – 5460	60	CLAYSTONE: medium dark gray (N4), medium gray (N5),	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30 10	occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: pyrite, calcite.	
5460 – 5470	60 30 10	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: pyrite, calcite.	TR
5470 – 5480	60 20 20	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, 15% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: pyrite, calcite.	15
5480 – 5490	50	SAND: white (N9), 60% very fine to fine, 30% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	20	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: pyrite, calcite.	
5490 – 5500	40	SAND: white (N9), 40% medium, 30% fine, 30% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics.	
	40	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: pyrite, calcite.	10
5500 – 5510	60	SAND: white (N9), 40% fine, 40% medium, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics.	
	20	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	20	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: pyrite, calcite.	10
5510 – 5520	60	SAND: white (N9), 40% fine, 40% medium, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics.	
	30	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm	10

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	moderately to firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: pyrite, calcite.	
5520 – 5530	40	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	10
	30	SAND: white (N9), 50% medium, 30% coarse, 20% fine quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics.	
	30	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous. Accessories: pyrite, calcite.	
5530 – 5540	50	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	TR
	30	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SAND: white (N9), 50% medium, 30% coarse, 20% fine, traces very coarse to conglomeratic quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics. Accessories: pyrite, calcite.	
5540 – 5550	50	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous.	TR
	30	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 60% medium, 30% fine, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics. Accessories: pyrite, calcite.	
5550 – 5560	60	CLAYSTONE: medium dark gray (N4), locally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm moderately to firm, locally silty, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SANDSTONE: medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. No Oil Show.	
	20	SAND: white (N9), 50% fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics. Accessories: pyrite, calcite.	
5560 – 5570	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. No Oil Show.	
	20	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: pyrite, calcite.	
5570 – 5580	40	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	TR
	40	SANDSTONE: medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity.	
	20	Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 50% fine, 30% medium, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics. Accessories: pyrite, calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
5580 – 5590	40	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	5
	40	SAND: white (N9), 60% fine, 30% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics.	
	20	SANDSTONE: medium light gray (N6), medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: pyrite, calcite.	
5590 – 5600	50	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	TR
	30	SAND: white (N9), 50% fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics.	
	20	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: pyrite, calcite.	
5600 – 5610	40	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, friable to moderately friable, fair visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	TR
	30	SAND: white (N9), 60% fine, 30% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics.	
	30	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous. Accessories: pyrite, calcite.	
5610 – 5620	40	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky,	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	40	amorphous, locally subtabular, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous. SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately consolidated to moderately friable, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	20	SAND: white (N9), 60% very fine to fine, 40% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted, locally with dark lithics. Accessories: pyrite, calcite.	
5620 – 5630	40	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), very occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	5
	40	SANDSTONE: medium light gray (N6), light gray (N7), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately consolidated to moderately friable, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	20	SAND: white (N9), 50% very fine to fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics. Accessories: pyrite, calcite.	
5630 – 5640	60	SAND: white (N9), 50% very fine to fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, locally with dark lithics.	TR
	20	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), very occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, locally subtabular, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), light gray (N7), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately consolidated to moderately friable, occasionally micropyrritic, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: pyrite, calcite.	
5640 – 5650	40 30 30	SAND: white (N9), 60% very fine to fine, 40% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted, locally with dark lithics. CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), very occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: medium light gray (N6), light gray (N7), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, scarce calcareous cement, moderately consolidated to moderately friable, occasionally micropyrritic, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: pyrite, calcite.	TR
5650 – 5660	50 30 20	SAND: white (N9), 60% very fine to fine, 40% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted, locally with dark lithics. SANDSTONE: medium light gray (N6), light gray (N7), locally medium gray (N5), very occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally micropyrritic, poor visual porosity. No Oil Show. CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: pyrite, limestone, calcite.	
5660 – 5670	60 20 20	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally olive black (5Y 2/1), earthy, subblocky to blocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: medium light gray (N6), light gray (N7), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally micropyrritic, poor visual porosity. No Oil Show. SAND: white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: pyrite, limestone, calcite.	
5670 – 5680	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	very microcarbonaceous, non calcareous. SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally micropyrritic, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: pyrite, limestone, calcite, slickenside.	
5680 – 5690	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally micropyrritic, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: pyrite, calcite, slickenside.	
5690 – 5700	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	30	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally micropyrritic, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: pyrite, calcite.	
5700 – 5710	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	30	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally micropyrritic, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: pyrite, calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
5710 – 5720	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally micropyrritic, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: pyrite, calcite.	
5720 – 5730	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	30	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally micropyrritic, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: pyrite, calcite.	
5730 – 5740	40	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	40	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight occasionally dirty, poor visual porosity. No Oil Show.	
	20	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: pyrite, calcite.	
5740 – 5750	50	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	40	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight occasionally dirty, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		with dark lithics. Accessories: calcite.	
5750 – 5760	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight occasionally dirty, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics. Accessories: calcite.	
5760 – 5770	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite.	
5770 – 5780	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		with dark lithics. Accessories: calcite, pyrite.	
5780 – 5790	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), very occasionally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium light gray (N6), medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
5790 – 5800	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	20	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
5800 – 5810	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, poor visual porosity. No Oil Show. Accessories: calcite, coal.	
5810 – 5820	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, poor visual porosity. No Oil Show. Accessories: calcite, coal.	
5820 – 5830	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminar, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, poor visual porosity. No Oil Show. Accessories: calcite, coal.	
5830 – 5840	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	20	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, poor visual porosity. No Oil Show. Accessories: calcite, coal.	
5840 – 5850	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
5850 – 5860	50	SAND: white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, locally with dark lithics.	
	30	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, poor visual porosity. No Oil Show.	
	20	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
5860 – 5870	50	SAND: white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with dark lithics.	
	40	SANDSTONE: medium gray (N5), medium light gray (N6), occasionally medium dark gray (N4), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, locally tight, with dark minerals and glauconite inclusions poor visual porosity. No Oil Show.	
	10	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
5870 – 5880	50	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, locally consolidated, tight in part, with dark minerals and glauconite inclusions poor visual porosity. No Oil Show.	
	40	SAND: white (N9), 70% fine, 20% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, with dark lithics.	
	10	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
5880 – 5890	60	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, locally consolidated, tight in part, with dark minerals and glauconite inclusions poor visual porosity. No Oil Show.	
	30	SAND: white (N9), 50% fine, 30% medium, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted, with dark lithics.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
5890 – 5900	60	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, locally consolidated, tight in part, with dark minerals and glauconite inclusions poor visual porosity. No Oil Show.	
	30	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with dark lithics. Accessories: calcite, pyrite.	
5900 – 5910	70	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals and glauconite inclusions poor visual porosity. No Oil Show.	
	20	CLAYSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with dark lithics. Accessories: calcite, pyrite.	
5910 – 5920	50	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals and glauconite inclusions poor visual porosity. No Oil Show.	
	30	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, very microcarbonaceous, non calcareous.	
	20	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with dark lithics. Accessories: calcite.	
5920 – 5930	70	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions poor visual porosity. No Oil Show.	
	20	SAND: white (N9), 70% fine, 20% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	with dark lithics. CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, very micromicaceous, very microcarbonaceous, non calcareous. Accessories: calcite.	
5930 – 5940	50	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, very micromicaceous, very microcarbonaceous, non calcareous.	
	40	SANDSTONE: medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with dark lithics. Accessories: calcite, pyrite.	
5940 – 5950	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with dark lithics. Accessories: calcite, pyrite.	
5950 – 5960	60	SANDSTONE: medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	40	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with dark lithics. Accessories: calcite, pyrite.	
5960 – 5970	40	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	SANDSTONE: medium gray (N5), medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	30	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
5970 – 5980	40	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately 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, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	30	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
5980 – 5990	40	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	30	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: medium gray (N5), locally medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
5990 – 6000	40	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	40	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium gray (N5), locally medium light gray (N6), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6000 – 6010	40	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	30	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6010 – 6020	50	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	20	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6020 – 6030	40	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	40	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6030 – 6040	40	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6040 – 6050	60	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6050 – 6060	70	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6060 – 6070	80	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, pyrite.	
6070 – 6080	80 20 Tr	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6080 – 6090	90 10 Tr	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6090 – 6100	80 20 Tr	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6100 – 6110	80 10	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6110 – 6120	90	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6120 – 6130	60	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite, microfossils.	
6130 – 6140	40	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	40	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with glauconite and calcareous fragments inclusions, poor visual porosity. No Oil Show.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, pyrite, microfossils.	
6140 – 6150	50	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with glauconite and calcareous fragments inclusions, poor visual porosity. No Oil Show.	
	20	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SAND: white (N9), 60% very fine to fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite, microfossils.	
6150 – 6160	70	SANDSTONE: medium gray (N5), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, with glauconite and calcareous fragments inclusions, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	TR
	10	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SAND: white (N9), 60% very fine to fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite.	
6160 – 6170	60	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally consolidated, with glauconite and calcareous fragments inclusions, poor visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	10
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SAND: white (N9), 70% very fine to fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite.	
6170 – 6180	60	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with glauconite inclusions, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	5
	20	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SAND: white (N9), 80% very fine to fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	
6180 – 6190	70	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with glauconite inclusions, poor visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	10
	10	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SAND: white (N9), 90% very fine to fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
6190 – 6200	70	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with glauconite inclusions, poor visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	10
	10	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SAND: white (N9), 90% very fine to fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	
6200 – 6210	80	SANDSTONE: light gray (N7), locally medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with glauconite inclusions, poor visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	10
	10	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SAND: white (N9), 90% very fine to fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6210 – 6220	80	SANDSTONE: light gray (N7), locally medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with glauconite inclusions, poor visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	10
	10	CLAYSTONE: medium dark gray (N4), locally dark gray (N3),	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 Tr	earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6220 – 6230	70 20 10	SANDSTONE: light gray (N7), locally medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with glauconite inclusions, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	5
6230 – 6240	40 40 20	SANDSTONE: light gray (N7), locally medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with glauconite and shell fragments inclusions, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 60% very fine to fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	TR
6240 – 6250	50	SANDSTONE: light gray (N7), locally medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with glauconite and shell fragments inclusions, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 50% very fine to fine, 50% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	20	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
6250 – 6260	50	SAND: white (N9), 50% fine, 50% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	30	SANDSTONE: light gray (N7), locally medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally consolidated, locally with glauconite and shell fragments inclusions, fair visual porosity.	
	20	Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	10
6260 – 6270	60	SANDSTONE: light gray (N7), locally medium light gray (N6), very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with glauconite and shell fragments inclusions, fair visual porosity.	
	40	Fluorescence: NVOS, 20% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	Tr	SAND: white (N9), 50% fine, 50% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	20
6270 – 6280	60	SANDSTONE: light gray (N7), locally medium light gray (N6), very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with glauconite and shell fragments inclusions, poor visual porosity. Fluorescence: NVOS, 25% pin point pale yellowish natural	25

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	40 Tr	fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 60% medium, 40% fine, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
6280 – 6290	60 40 Tr	SAND: white (N9), 60% medium, 40% fine, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. SANDSTONE: light gray (N7), locally medium light gray (N6), very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with glauconite and shell fragments inclusions, fair visual porosity. Fluorescence: NVOS, 40% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	40
6290 – 6300	60 40 Tr	SAND: white (N9), 60% medium, 30% fine, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. SANDSTONE: light gray (N7), locally medium light gray (N6), very light gray (N8), very fine to fine, traces medium quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with glauconite and shell fragments inclusions, fair visual porosity. Fluorescence: NVOS, 30% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	30
6300 – 6310	60 40	SAND: white (N9), 70% medium, 20% fine, 10% coarse to very coarse, traces conglomeratic quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. SANDSTONE: light gray (N7), locally medium light gray (N6), very light gray (N8), very fine to fine, traces medium quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with glauconite and shell fragments inclusions, fair visual porosity.	30

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	Fluorescence: NVOS, 30% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
6310 – 6320	40	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	10
	30	SAND: white (N9), 60% medium, 30% fine, 10% coarse, traces very coarse to conglomeratic quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	30	SANDSTONE: light gray (N7), locally medium light gray (N6), very light gray (N8), very fine to fine, traces medium quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with glauconite and shell fragments inclusions, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: calcite, pyrite.	
6320 – 6330	40	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	10
	30	SAND: white (N9), 60% medium, 30% fine, 10% coarse, traces very coarse to conglomeratic quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	30	SANDSTONE: light gray (N7), locally medium light gray (N6), very light gray (N8), very fine to fine, traces medium quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with glauconite and shell fragments inclusions, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: calcite, pyrite.	
6330 – 6340	50	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	10
	30	SANDSTONE: light gray (N7), locally medium light gray (N6), very light gray (N8), very fine to fine, traces medium quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	matrix, calcareous cement, moderately friable, locally with glauconite and shell fragments inclusions, fair visual porosity. SAND: white (N9), 60% fine, 30% medium, 10% coarse, traces very coarse to conglomeratic quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: calcite, pyrite.	
6340 – 6350	70	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusion, fair visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	10	SAND: white (N9), very fine to fine, traces medium, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	
6350 – 6360	70	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusion, fair visual porosity.	
	Tr	SAND: white (N9), very fine to fine, traces medium, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: calcite, pyrite.	
6360 – 6370	70	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusion, fair visual porosity. No Oil Show. SAND: white (N9), 60% fine, 30% medium, 10% coarse, traces very coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, poor sorted. Accessories: calcite, pyrite.	
6370 – 6380	60	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 60% fine, 30% medium, 10% coarse, traces very coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, poor sorted. Accessories: calcite, pyrite.	
6380 – 6390	60	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 60% fine, 30% medium, 10% coarse, traces very coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, poor sorted. Accessories: calcite, pyrite, dolomite.	
6390 – 6400	70	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 Tr	blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusion, poor visual porosity. No Oil Show. SAND: white (N9), 80% fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. Accessories: calcite, pyrite, dolomite.	
6400 – 6410	70 20 10 Tr	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally with dark minerals inclusion, poor visual porosity. No Oil Show. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. Accessories: calcite, pyrite, dolomite.	
6410 – 6420	80 10 10	CLAYSTONE: medium dark gray (N4), very occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, pyrite, dolomite.	
6420 – 6430	80 10	CLAYSTONE: medium dark gray (N4), very occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	sandstone, slightly calcareous. SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. Accessories: dolomite, calcite, pyrite.	
6430 – 6440	90	CLAYSTONE: medium dark gray (N4), very occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. Accessories: dolomite, calcite, pyrite.	
6440 – 6450	90	CLAYSTONE: medium dark gray (N4), very occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted. Accessories: dolomite, calcite, pyrite.	
6450 – 6460	70	CLAYSTONE: medium dark gray (N4), very occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SAND: white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, well sorted.	
	10	SANDSTONE: medium light gray (N6), locally light gray (N7), very occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
6460 – 6470	40	SAND: white (N9), 60% fine, 40% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, fair sorted.	
	30	SANDSTONE: light gray (N7), medium light gray (N6), locally medium gray (N5), very occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	30	CLAYSTONE: medium dark gray (N4), very occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. Accessories: shell fragments, calcite, pyrite.	
6470 – 6480	70	CLAYSTONE: medium dark gray (N4), very occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: light gray (N7), medium light gray (N6), locally medium gray (N5), very occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), 50% fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, occasionally angular, poor sorted. Accessories: shell fragments, calcite, pyrite.	
6480 – 6490	60	CLAYSTONE: medium dark gray (N4), very occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: light gray (N7), medium light gray (N6), locally medium gray (N5), very occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	20	SAND: white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	
6490 – 6500	50	CLAYSTONE: medium dark gray (N4), very occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SAND: white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	SANDSTONE: light gray (N7), medium light gray (N6), locally medium gray (N5), very occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		scarse argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6500 – 6510	70 10 10 10	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	TR
6410 – 6520	70 10 10	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	TR
6520 – 6530	70 10	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 10	to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, occasionally micropyrritic, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6530 – 6540	60 20 10 10	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, occasionally micropyrritic, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, slickenside, pyrite.	TR
6540 – 6550	60 20	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, occasionally micropyrritic, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, slickenside, pyrite.	
6550 – 6560	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SANDSTONE: light gray (N7), medium light gray (N6), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, occasionally micropyrritic, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, slickenside, pyrite.	
6560 – 6570	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, slickenside, pyrite.	
6570 – 6580	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), earthy, blocky to subblocky,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: medium light gray (N6), medium gray (N5), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, with occasionally glauconite inclusions, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, slickenside, pyrite.	
6580 – 6590	60	CLAYSTONE: medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm, locally moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: light gray (N7), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally friable, tight in part, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	
6590 – 6600	60	CLAYSTONE: medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm, locally moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: light gray (N7), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally friable, tight in part, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	
6600 – 6610	50	SANDSTONE: light gray (N7), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	50 Tr	moderately friable to moderately consolidated, locally friable, tight in part, with dark minerals inclusion, poor visual porosity. No Oil Show. CLAYSTONE: medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm, locally moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	
6610 – 6620	40 30 30	SANDSTONE: light gray (N7), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally friable, tight in part, with dark minerals inclusion, poor visual porosity. No Oil Show. CLAYSTONE: medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm, locally moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 50% medium, 30% coarse, 10% very coarse, 10% fine, quartz grain, hyaline, translucent, subangular to subrounded, locally angular, poor sorted. Accessories: calcite, pyrite.	
6620 – 6630	50 30 20	CLAYSTONE: medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm, locally moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: light gray (N7), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally friable, tight in part, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6630 – 6640	70 20 10	CLAYSTONE: medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm, locally moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: light gray (N7), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally friable, tight in part, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
6640 – 6650	70	CLAYSTONE: medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm, locally moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: light gray (N7), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally friable, tight in part, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6650 – 6660	80	CLAYSTONE: medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, occasionally subtabular, firm, locally moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: light gray (N7), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally friable, tight in part, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, pyrite, dolomite.	
6660 – 6670	90	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, pyrite, dolomite.	
6670 – 6680	70	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6680 – 6690	40	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	30	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6690 – 6700	60	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	20	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
6700 – 6710	70	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6710 – 6720	30	SAND: white (N9), 80% very fine to fine, 20% medium quartz grain,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, with dark minerals and calcareous fragments inclusion, poor visual porosity. No Oil Show.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6720 – 6730	30	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, with dark minerals and calcareous fragments inclusion, poor visual porosity. No Oil Show.	
	20	SAND: white (N9), 90% very fine to fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6730 – 6740	50	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, with dark minerals and calcareous fragments inclusion, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	5
	30	SAND: white (N9), 60% medium, 30% fine, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	20	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6740 – 6750	80	SAND: white (N9), 70% fine, 30% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	30
	20	SANDSTONE: light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals and calcareous fragments inclusion, fair visual porosity. Fluorescence: NVOS, 30% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	Tr	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
6750 – 6760	70	SAND: white (N9), 60% medium, 40% fine, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	25
	30	SANDSTONE: light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals and calcareous fragments inclusion, fair visual porosity. Fluorescence: NVOS, 25% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. FOS.	
	Tr	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
6760 – 6770	70	SANDSTONE: light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals and calcareous fragments inclusion, fair visual porosity. Fluorescence: NVOS, 20% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	20
	30	SAND: white (N9), 60% medium, 40% fine, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	
	Tr	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, pyrite.	
6770 – 6780	60 40 Tr	SANDSTONE: light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals and calcareous fragments inclusion, fair visual porosity. Fluorescence: NVOS, 20% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 70% medium, 30% fine, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	20
6780 – 6790	70 30 Tr	SAND: white (N9), 50% medium, 50% fine, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. SANDSTONE: light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals and calcareous fragments inclusion, fair visual porosity. Fluorescence: NVOS, 15% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	15
6790 – 6800	50 50 Tr	SAND: white (N9), 50% medium, 50% fine quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. SANDSTONE: light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals and calcareous fragments inclusion, fair visual porosity. Fluorescence: NVOS, 15% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	15

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
6800 – 6810	60	SAND: white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	20
	40	SANDSTONE: light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals and calcareous fragments inclusion, fair visual porosity.	
	Tr	Fluorescence: NVOS, 20% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), earthy, blocky to subblocky, locally amorphous, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
6810 – 6820	60	SANDSTONE: light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals and calcareous fragments inclusion, fair visual porosity.	15
	20	Fluorescence: NVOS, 15% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	20	SAND: white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
6820 – 6830	60	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	30	SANDSTONE: light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, fair visual porosity.	
	10	Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite.	
6830 – 6840	60	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part,	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, fair visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	10	SAND: white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite.	
6840 – 6850	50	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	40	SANDSTONE: light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, fair visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	10	SAND: white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite.	
6850 – 6860	50	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	30	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6860 – 6870	40	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	30	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6870 – 6880	50	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	30	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SAND: white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite, slickenside.	
6880 – 6890	50	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SAND: white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite, slickenside.	
6890 – 6900	60	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	calcareous. SAND: white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite, slickenside.	
6900 – 6910	50	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	40	SANDSTONE: medium light gray (N6), locally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals and calcareous fragments inclusion, poor visual porosity.	
	10	Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SAND: white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite.	
6910 – 6920	60	SANDSTONE: light gray (N7), very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals and locally calcareous fragments inclusion, poor visual porosity.	20
		Fluorescence: NVOS, 20% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	20	SAND: white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	
	20	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: calcite, pyrite.	
6920 – 6930	70	SANDSTONE: light gray (N7), very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals and locally calcareous fragments inclusion, poor visual porosity.	30

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 10	Fluorescence: NVOS, 30% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite.	
6930 – 6940	70 30 Tr	SANDSTONE: light gray (N7), very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals and locally calcareous fragments inclusion, poor visual porosity. Fluorescence: NVOS, 40% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite, coal.	40
6940 – 6950	80 20 Tr	SANDSTONE: light gray (N7), very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals and locally calcareous fragments inclusion, poor visual porosity. Fluorescence: NVOS, 40% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 50% fine, 50% medium quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite, coal.	40
6950 – 6960	80	SANDSTONE: light gray (N7), very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals and locally calcareous fragments inclusion, poor visual porosity. Fluorescence: NVOS, 20% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut	20

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 Tr	fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 50% fine, 50% medium quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite, coal.	
6960 – 6970	60 20 20	SANDSTONE: light gray (N7), very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals and locally calcareous fragments inclusion, poor visual porosity. Fluorescence: NVOS, 15% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 60% fine, 40% medium quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite, coal.	15
6970 – 6980	40 40 20	SANDSTONE: light gray (N7), very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals and locally calcareous fragments inclusion, poor visual porosity. Fluorescence: NVOS, 10% pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 50% fine, 50% medium quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. Accessories: calcite, pyrite.	10
6980 – 6990	70 20 10	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. SAND: white (N9), 70% very fine to fine, 30% medium quartz grain,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite.	
6990 – 7000	60	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), 70% very fine to fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: calcite, pyrite.	
7000 – 7010	80	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 80% very fine to fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	
7010 – 7020	80	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally brownish black (5YR 2/1), earthy, subblocky, locally blocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	
7020 – 7030	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	
7030 – 7040	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	calcareous. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	
7040 – 7050	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, pyrite. NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.	
7050 – 7060	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), 80% very fine to fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite. NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.	
7060 – 7070	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	TR
	20	SAND: white (N9), 80% very fine to fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7070 – 7080	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	10	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	10	SAND: white (N9), 60% fine, 30% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. Accessories: calcite, pyrite.	
7080 – 7090	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 80% fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, microfossils, pyrite.	
7090 – 7100	80	CLAYSTONE: medium dark gray (N4), dark gray (N3), olive gray (5Y 4/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. No Oil Show.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SAND: white (N9), 80% fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, microfossils, pyrite.	
7100 – 7110	70	CLAYSTONE: medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	calcareous. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: microfossils, calcite, pyrite.	
7110 – 7120	50	CLAYSTONE: medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	30	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: microfossils, calcite, pyrite.	
7120 – 7130	80	CLAYSTONE: medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: microfossils, calcite, pyrite.	
7130 – 7140	80	CLAYSTONE: medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 Tr Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: pyrite, calcite, dolomite.	
7140 – 7150	40 30 20 10	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: pyrite, calcite, dolomite.	TR
7150 – 7160	60 20 10 10	CLAYSTONE: medium dark gray (N4), dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous,	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7160 – 7170	50 30 10 10	CLAYSTONE: medium dark gray (N4), dark gray (N3), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular to sublamellar, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 50% fine, 40% medium, 10% coarse, traces very coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	TR
7170 – 7180	80 10 10 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SAND: white (N9), 50% fine, 40% medium, 10% coarse, traces very coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. Accessories: pyrite, calcite, dolomite.	TR
7180 – 7190	50 20	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy,	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, slow, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	
	10	SAND: white (N9), 90% very fine to fine, 10% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: pyrite, calcite, dolomite.	
7190 – 7200	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite, dolomite.	
7200 – 7210	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	20	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite, dolomite.	
7210 – 7220	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite, dolomite.	
7220 – 7230	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally dark gray (N3), olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7230 – 7240	70	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: pyrite, calcite.	
7240 – 7250	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7250 – 7260	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7260 – 7270	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7270 – 7280	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite. NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.	
7280 – 7290	90 10 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally subtabular, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite. NOTE: SAMPLE CONTAMINATED WITH CHEMICAL.	
7290 – 7300	90 10 Tr	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, subblocky to blocky, amorphous, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	
7300 – 7310	40 40 10 10	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7310 – 7320	50	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SAND: white (N9), 60% very fine to fine, 40% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	
	10	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7320 – 7330	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SAND: white (N9), 60% very fine to fine, 40% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	
	10	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7330 – 7340	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	sandstone, slightly calcareous. SAND: white (N9), 80% very fine to fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: pyrite, calcite.	
7340 – 7350	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SAND: white (N9), 80% very fine to fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: pyrite, calcite.	
7350 – 7360	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: pyrite, calcite.	
7360 – 7370	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	sandstone, slightly calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: pyrite, calcite.	
7370 – 7380	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7380 – 7390	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7390 – 7400	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7400 – 7410	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, occasionally silty, occasionally micropyrictic, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7410 – 7420	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 Tr	firm, occasionally silty, occasionally micropyrritic, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	
7420 – 7430	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, occasionally silty, occasionally micropyrritic, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	
7430 – 7440	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, occasionally silty, occasionally micropyrritic, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	
7440 – 7450	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 Tr	calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, non calcareous. Accessories: pyrite, calcite.	
7450 – 7460	60 20 10 10	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, non calcareous. Accessories: pyrite, calcite, dolomite.	TR
7460 – 7470	60 20 10 10	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellowish natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, non calcareous.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: pyrite, calcite.	
7470 – 7480	40	CLAYSTONE: medium dark gray (N4), medium gray (N5), occasionally olive black (5Y 2/1), dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	5
	40	SAND: white (N9), very fine to fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	SANDSTONE: light gray (N7), medium light gray (N6), occasionally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity.	
	Tr	Fluorescence: NVOS, 5% pin point pale yellowish natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, non calcareous. Accessories: pyrite, calcite.	
7480 – 7490	50	SAND: white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	5
	30	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: light gray (N7), medium light gray (N6), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity.	
		Fluorescence: NVOS, 5% pin point pale yellowish natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. Accessories: pyrite, calcite.	
RIO BRAVO SHALY TOP. AT 7489.00 ft. MD (RT); 4568.31 ft. TVD (RT)			
7490 – 7500	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	5
	30	SANDSTONE: light gray (N7), medium light gray (N6), locally very light gray (N8), occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	Fluorescence: NVOS, 5% pin point pale yellowish natural fluorescence, crush, weak, faint, even, yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: pyrite, calcite.	
7500 – 7510	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminar, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: light gray (N7), medium light gray (N6), locally very light gray (N8), occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: pyrite, calcite.	
7510 – 7520	60	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminar, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	30	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: pyrite, calcite, coal.	
7520 – 7530	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminar, firm to moderately firm, occasionally silty, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), occasionally olive gray (5Y 4/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 70% fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. Accessories: pyrite, calcite, coal.	
7530 – 7540	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminar, firm	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 80% fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: pyrite, calcite, coal.	
7540 – 7550	90	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, locally silty, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite, coal.	
7550 – 7560	80	CLAYSTONE: medium dark gray (N4), medium gray (N5), locally dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, locally soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite, coal.	
7560 – 7570	80	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish gray (5YR 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, locally soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium gray (N5), locally medium dark gray (N4), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite, dolomite.	
7570 – 7580	80	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish gray (5YR 4/1), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	blocky to subblocky, amorphous, occasionally subtabular to sublaminal, firm to moderately firm, locally soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), locally medium dark gray (N4), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite, dolomite.	
7580 – 7590	90	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish gray (5YR 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminal, firm to moderately firm, locally soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium gray (N5), locally medium dark gray (N4), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	
7590 – 7600	90	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish gray (5YR 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminal, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium gray (N5), locally medium dark gray (N4), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7600 – 7610	90	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish gray (5YR 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminal, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium gray (N5), locally medium dark gray (N4), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7610 – 7620	100	CLAYSTONE: medium dark gray (N4), locally dark gray (N3),	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	occasionally olive gray (5Y 4/1), brownish gray (5YR 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), locally medium dark gray (N4), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7620 – 7630	100	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish gray (5YR 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium gray (N5), locally medium dark gray (N4), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	
7630 – 7640	90	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish gray (5YR 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SILTSTONE: medium gray (N5), locally medium dark gray (N4), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7640 – 7650	90	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish gray (5YR 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminae, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7650 – 7660	90	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish gray (5YR 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminar, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SILTSTONE: medium gray (N5), locally medium dark gray (N4), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
7660 – 7668	90	CLAYSTONE: medium dark gray (N4), locally dark gray (N3), occasionally olive gray (5Y 4/1), brownish gray (5YR 4/1), earthy, blocky to subblocky, amorphous, occasionally subtabular to sublaminar, firm to moderately firm, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), locally very light gray (N8), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, friable to moderately friable, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SILTSTONE: medium gray (N5), locally medium dark gray (N4), earthy, blocky to subblocky, amorphous, firm to moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone, slightly calcareous. Accessories: pyrite, calcite.	
FINAL TOTAL DEPTH 7668.0 ft. MD(RT): 4687.92 ft. TVD(RT)			

WELL: LO6-31D

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
TALARA Fm.							
545	54	0.3	32	0	0	0	0
546	100	0.4	37	0	0	0	0
547	120	0.4	36	0	0	0	0
548	118	0.4	36	0	0	0	0
549	124	0.3	31	0	0	0	0
550	139	0.3	31	0	0	0	0
551	109	0.3	31	0	0	0	0
552	114	0.2	24	0	0	0	0
553	131	0.2	21	0	0	0	0
554	130	0.2	21	0	0	0	0
555	113	0.3	25	0	0	0	0
556	132	0.3	25	0	0	0	0
557	140	0.4	39	0	0	0	0
558	137	0.4	39	0	0	0	0
559	114	0.6	58	0	0	0	0
560	149	0.6	58	0	0	0	0
561	140	0.6	58	0	0	0	0
562	126	0.9	88	0	0	0	0
563	137	0.9	88	0	0	0	0
564	137	1.4	137	0	0	0	0
565	130	2.4	235	0	0	0	0
566	71	2.4	235	0	0	0	0
567	153	2.6	263	0	0	0	0
568	128	2.6	263	0	0	0	0
569	158	2.6	263	0	0	0	0
570	202	2.7	265	0	0	0	0
571	188	2.7	265	0	0	0	0
572	198	2.7	265	0	0	0	0
573	185	2.7	265	0	0	0	0
574	189	2.6	262	0	0	0	0
575	196	2.6	262	0	0	0	0
576	221	0.4	37	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
577	180	0.4	37	0	0	0	0
578	150	0.4	41	0	0	0	0
579	112	0.4	41	0	0	0	0
580	112	0.4	44	0	0	0	0
581	100	0.4	44	0	0	0	0
582	95	0.5	46	0	0	0	0
583	94	0.5	45	0	0	0	0
584	103	0.5	45	0	0	0	0
585	115	0.5	45	0	0	0	0
586	120	0.5	45	0	0	0	0
587	128	0.5	45	0	0	0	0
588	140	0.5	47	0	0	0	0
589	138	0.5	50	0	0	0	0
590	139	0.5	50	0	0	0	0
591	141	0.5	50	0	0	0	0
592	146	0.5	53	0	0	0	0
593	143	0.5	53	0	0	0	0
594	201	0.6	58	0	0	0	0
595	209	0.6	58	0	0	0	0
596	91	0.6	58	0	0	0	0
597	142	0.6	63	0	0	0	0
598	135	0.6	63	0	0	0	0
599	124	0.8	75	0	0	0	0
600	135	0.8	75	0	0	0	0
601	156	0.8	75	0	0	0	0
602	201	0.9	88	0	0	0	0
603	180	0.9	88	0	0	0	0
604	228	0.9	88	0	0	0	0
605	206	1.0	100	0	0	0	0
606	237	1.0	100	0	0	0	0
607	174	1.0	100	0	0	0	0
608	189	1.1	108	0	0	0	0
609	101	0.8	82	0	0	0	0
610	129	0.6	55	0	0	0	0
611	131	0.6	63	0	0	0	0
612	133	0.7	72	0	0	0	0
613	124	0.7	72	0	0	0	0
614	123	0.7	73	0	0	0	0
615	124	0.7	73	0	0	0	0
616	127	0.8	78	0	0	0	0
617	153	0.8	78	0	0	0	0
618	135	0.8	78	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
619	130	0.9	91	0	0	0	0
620	162	1.1	114	0	0	0	0
621	160	1.1	114	0	0	0	0
622	161	1.4	139	0	0	0	0
623	138	1.4	139	0	0	0	0
624	138	1.4	139	0	0	0	0
625	153	2.1	207	0	0	0	0
626	122	2.1	207	0	0	0	0
627	137	2.1	207	0	0	0	0
628	135	2.3	232	0	0	0	0
629	167	2.3	232	0	0	0	0
630	149	2.5	251	0	0	0	0
631	141	2.5	251	0	0	0	0
632	140	2.5	251	0	0	0	0
633	163	2.6	257	0	0	0	0
634	147	2.6	257	0	0	0	0
635	142	2.6	257	0	0	0	0
636	128	2.5	249	0	0	0	0
637	118	0.7	67	0	0	0	0
638	180	0.7	67	0	0	0	0
639	155	0.7	67	0	0	0	0
640	92	0.7	67	0	0	0	0
641	132	0.7	67	0	0	0	0
642	140	0.7	67	0	0	0	0
643	194	0.7	67	0	0	0	0
644	181	0.7	69	0	0	0	0
645	98	0.7	69	0	0	0	0
646	144	0.7	69	0	0	0	0
647	177	0.7	71	0	0	0	0
648	146	0.7	71	0	0	0	0
649	154	0.7	71	0	0	0	0
650	172	0.7	73	0	0	0	0
651	156	0.7	73	0	0	0	0
652	140	0.7	73	0	0	0	0
653	144	0.8	76	0	0	0	0
654	136	0.8	76	0	0	0	0
655	133	0.9	85	0	0	0	0
656	93	1.0	99	0	0	0	0
657	137	1.0	99	0	0	0	0
658	131	1.2	115	0	0	0	0
659	153	1.2	115	0	0	0	0
660	188	1.2	115	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
661	150	1.4	140	0	0	0	0
662	131	1.4	140	0	0	0	0
663	112	1.4	140	0	0	0	0
664	136	1.8	177	0	0	0	0
665	140	1.8	177	0	0	0	0
666	127	2.2	222	0	0	0	0
667	206	2.2	222	0	0	0	0
668	177	2.2	222	0	0	0	0
669	157	2.6	263	0	0	0	0
670	161	0.8	78	0	0	0	0
671	130	0.8	78	0	0	0	0
672	141	0.8	78	0	0	0	0
673	84	0.8	77	0	0	0	0
674	100	0.8	77	0	0	0	0
675	154	0.8	77	0	0	0	0
676	184	0.8	75	0	0	0	0
677	186	0.8	75	0	0	0	0
678	161	0.8	81	0	0	0	0
679	137	0.8	82	0	0	0	0
680	155	0.9	85	0	0	0	0
681	133	0.8	80	0	0	0	0
682	144	0.8	81	0	0	0	0
683	140	0.8	79	0	0	0	0
684	148	0.8	78	0	0	0	0
685	157	0.8	77	0	0	0	0
686	153	0.8	80	0	0	0	0
687	151	0.9	86	0	0	0	0
688	155	0.9	90	0	0	0	0
689	181	0.9	91	0	0	0	0
690	109	1.0	100	0	0	0	0
691	135	1.1	105	0	0	0	0
692	154	1.5	150	0	0	0	0
693	143	1.9	188	0	0	0	0
694	113	1.9	194	0	0	0	0
695	152	1.9	194	0	0	0	0
696	143	1.9	194	0	0	0	0
697	163	2.3	227	0	0	0	0
698	78	2.3	227	0	0	0	0
699	177	2.3	227	0	0	0	0
700	154	2.6	262	0	0	0	0
701	135	2.6	262	0	0	0	0
702	134	2.5	247	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
703	134	2.5	247	0	0	0	0
704	144	2.5	247	0	0	0	0
705	175	2.5	247	0	0	0	0
706	99	2.0	204	0	0	0	0
707	61	2.0	204	0	0	0	0
708	100	2.0	204	0	0	0	0
709	65	2.0	204	0	0	0	0
710	75	2.0	204	0	0	0	0
711	84	1.7	166	0	0	0	0
712	95	1.5	154	0	0	0	0
713	95	1.7	167	0	0	0	0
714	101	1.8	179	0	0	0	0
715	90	1.8	179	0	0	0	0
716	110	2.1	211	0	0	0	0
717	89	2.1	211	0	0	0	0
718	85	2.3	230	0	0	0	0
719	86	2.5	249	0	0	0	0
720	98	2.5	249	0	0	0	0
721	98	2.8	283	0	0	0	0
722	152	2.1	214	0	0	0	0
723	192	1.5	145	0	0	0	0
724	171	1.5	145	0	0	0	0
725	162	1.6	164	0	0	0	0
726	153	1.6	164	0	0	0	0
727	175	1.6	164	0	0	0	0
728	186	1.7	167	0	0	0	0
729	168	1.7	167	0	0	0	0
730	153	1.7	167	0	0	0	0
731	186	1.6	162	0	0	0	0
732	192	1.6	162	0	0	0	0
733	202	1.6	162	0	0	0	0
734	176	1.6	162	0	0	0	0
735	179	1.4	138	0	0	0	0
736	90	1.4	138	0	0	0	0
737	137	1.4	138	0	0	0	0
738	159	1.3	133	0	0	0	0
739	174	1.3	133	0	0	0	0
740	175	1.3	133	0	0	0	0
741	162	1.4	139	0	0	0	0
742	183	1.5	146	0	0	0	0
743	144	1.5	153	0	0	0	0
744	157	1.5	153	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
745	154	1.7	165	0	0	0	0
746	164	1.8	177	0	0	0	0
747	176	1.8	177	0	0	0	0
748	161	0.7	71	0	0	0	0
749	100	0.8	75	0	0	0	0
750	80	0.8	79	0	0	0	0
751	76	0.8	79	0	0	0	0
752	123	0.9	90	0	0	0	0
753	143	0.9	90	0	0	0	0
754	170	0.9	90	0	0	0	0
755	158	1.0	100	0	0	0	0
756	160	1.0	100	0	0	0	0
757	126	1.0	101	0	0	0	0
758	126	1.0	101	0	0	0	0
759	130	1.0	101	0	0	0	0
760	194	1.0	101	0	0	0	0
761	147	1.0	97	0	0	0	0
762	128	1.0	97	0	0	0	0
763	171	0.9	92	0	0	0	0
764	129	0.9	92	0	0	0	0
765	123	0.9	92	0	0	0	0
766	166	0.9	86	0	0	0	0
767	158	0.9	86	0	0	0	0
768	116	0.9	85	0	0	0	0
769	185	0.9	85	0	0	0	0
770	177	0.9	93	0	0	0	0
771	173	0.9	93	0	0	0	0
772	180	1.1	110	0	0	0	0
773	204	1.1	110	0	0	0	0
774	134	1.3	131	0	0	0	0
775	143	1.3	131	0	0	0	0
776	210	1.3	131	0	0	0	0
777	164	2.2	140	42	0	0	0
778	157	3.2	149	84	0	0	0
779	148	3.2	149	84	0	0	0
780	140	0.7	74	0	0	0	0
781	152	0.7	74	0	0	0	0
782	273	0.8	83	0	0	0	0
783	250	0.8	83	0	0	0	0
784	248	0.8	83	0	0	0	0
785	264	0.8	83	0	0	0	0
786	286	0.9	85	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
787	301	0.9	87	0	0	0	0
788	332	0.9	87	0	0	0	0
789	341	0.9	87	0	0	0	0
790	272	0.9	87	0	0	0	0
791	216	0.9	88	0	0	0	0
792	297	0.9	89	0	0	0	0
793	300	0.9	89	0	0	0	0
794	315	0.9	89	0	0	0	0
795	317	0.9	89	0	0	0	0
796	270	0.9	89	0	0	0	0
797	238	0.9	90	0	0	0	0
798	259	0.9	90	0	0	0	0
799	276	0.9	90	0	0	0	0
800	225	0.9	90	0	0	0	0
801	269	0.9	90	0	0	0	0
802	270	0.9	87	0	0	0	0
803	272	0.9	87	0	0	0	0
804	266	0.9	87	0	0	0	0
805	265	0.9	86	0	0	0	0
806	230	0.9	85	0	0	0	0
807	285	0.9	85	0	0	0	0
808	200	0.9	85	0	0	0	0
809	221	0.9	85	0	0	0	0
810	217	0.9	85	0	0	0	0
811	225	0.5	53	0	0	0	0
812	240	0.7	66	0	0	0	0
813	250	0.7	66	0	0	0	0
814	220	0.7	66	0	0	0	0
815	216	0.9	92	0	0	0	0
816	199	0.9	92	0	0	0	0
817	196	0.9	92	0	0	0	0
818	200	0.9	92	0	0	0	0
819	215	1.1	110	0	0	0	0
820	234	1.3	127	0	0	0	0
821	214	1.3	127	0	0	0	0
822	224	1.4	140	0	0	0	0
823	237	1.5	152	0	0	0	0
824	243	1.5	152	0	0	0	0
825	217	1.5	152	0	0	0	0
826	213	1.5	152	0	0	0	0
827	215	1.6	155	0	0	0	0
828	232	1.6	155	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
829	218	1.6	155	0	0	0	0
830	204	1.6	155	0	0	0	0
831	260	1.4	135	0	0	0	0
832	310	1.4	135	0	0	0	0
833	271	1.4	135	0	0	0	0
834	327	1.3	130	0	0	0	0
835	266	1.3	125	0	0	0	0
836	350	1.3	125	0	0	0	0
837	368	1.3	125	0	0	0	0
838	324	1.3	125	0	0	0	0
839	330	1.3	125	0	0	0	0
840	342	1.3	125	0	0	0	0
841	350	1.3	125	0	0	0	0
842	360	1.3	125	0	0	0	0
843	350	1.3	125	0	0	0	0
844	349	1.4	142	0	0	0	0
845	327	1.4	142	0	0	0	0
846	268	1.4	142	0	0	0	0
847	263	1.4	142	0	0	0	0
848	327	1.4	142	0	0	0	0
849	362	1.9	187	0	0	0	0
850	317	2.3	231	0	0	0	0
851	298	2.3	231	0	0	0	0
852	287	2.3	231	0	0	0	0
853	303	2.5	249	0	0	0	0
854	305	2.7	266	0	0	0	0
855	396	2.7	266	0	0	0	0
856	276	2.7	266	0	0	0	0
857	426	2.7	266	0	0	0	0
858	408	2.7	266	0	0	0	0
859	371	2.9	295	0	0	0	0
860	311	3.2	323	0	0	0	0
861	318	3.2	323	0	0	0	0
862	319	3.2	323	0	0	0	0
863	291	3.2	323	0	0	0	0
864	300	3.2	323	0	0	0	0
865	310	3.5	347	0	0	0	0
866	289	3.7	370	0	0	0	0
867	369	3.7	370	0	0	0	0
868	304	3.7	370	0	0	0	0
869	332	3.9	385	0	0	0	0
870	383	4.0	400	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
871	312	4.0	400	0	0	0	0
872	291	4.0	400	0	0	0	0
873	339	4.0	400	0	0	0	0
874	279	4.0	400	0	0	0	0
875	280	4.1	414	0	0	0	0
876	275	4.3	428	0	0	0	0
877	351	4.3	428	0	0	0	0
878	309	4.3	428	0	0	0	0
879	310	4.3	428	0	0	0	0
880	361	4.3	428	0	0	0	0
881	324	4.9	489	0	0	0	0
882	297	4.9	489	0	0	0	0
883	288	4.9	489	0	0	0	0
884	270	5.4	535	0	0	0	0
885	251	5.8	581	0	0	0	0
886	307	5.8	581	0	0	0	0
887	282	5.8	581	0	0	0	0
888	285	5.8	581	0	0	0	0
889	314	5.8	581	0	0	0	0
890	300	6.2	616	0	0	0	0
891	306	6.5	650	0	0	0	0
892	320	6.5	650	0	0	0	0
893	300	6.5	650	0	0	0	0
894	365	6.5	650	0	0	0	0
895	380	6.5	650	0	0	0	0
896	281	6.7	673	0	0	0	0
897	358	7.0	696	0	0	0	0
898	381	7.2	719	0	0	0	0
899	370	7.2	719	0	0	0	0
900	270	7.2	719	0	0	0	0
901	280	7.5	752	0	0	0	0
902	340	7.9	785	0	0	0	0
903	358	7.9	785	0	0	0	0
904	301	7.9	785	0	0	0	0
905	328	8.2	815	0	0	0	0
906	260	8.5	845	0	0	0	0
907	190	5.4	543	0	0	0	0
908	357	2.4	240	0	0	0	0
909	200	2.4	240	0	0	0	0
910	203	2.7	270	0	0	0	0
911	205	3.0	299	0	0	0	0
912	204	3.0	299	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
913	184	3.0	299	0	0	0	0
914	197	3.6	361	0	0	0	0
915	205	3.6	361	0	0	0	0
916	211	3.6	361	0	0	0	0
917	223	3.6	361	0	0	0	0
918	189	3.8	379	0	0	0	0
919	193	3.8	379	0	0	0	0
920	206	3.8	379	0	0	0	0
921	199	3.8	379	0	0	0	0
922	203	3.5	350	0	0	0	0
923	188	3.5	350	0	0	0	0
924	209	3.5	350	0	0	0	0
925	197	3.5	350	0	0	0	0
926	193	3.0	297	0	0	0	0
927	219	3.0	297	0	0	0	0
928	186	2.6	264	0	0	0	0
929	185	2.6	264	0	0	0	0
930	190	2.6	264	0	0	0	0
931	186	3.1	305	0	0	0	0
932	187	3.1	305	0	0	0	0
933	237	3.1	305	0	0	0	0
934	308	3.1	305	0	0	0	0
935	250	3.1	305	0	0	0	0
936	266	3.5	348	0	0	0	0
937	276	3.9	390	0	0	0	0
938	265	3.9	390	0	0	0	0
939	286	4.5	449	0	0	0	0
940	280	5.1	508	0	0	0	0
941	290	5.1	508	0	0	0	0
942	310	5.1	508	0	0	0	0
943	295	5.1	508	0	0	0	0
944	304	5.1	508	0	0	0	0
945	327	5.9	585	0	0	0	0
946	342	6.6	662	0	0	0	0
947	359	6.6	662	0	0	0	0
948	379	6.6	662	0	0	0	0
949	389	6.6	662	0	0	0	0
950	335	6.6	662	0	0	0	0
951	298	7.5	746	0	0	0	0
952	331	8.3	829	0	0	0	0
953	295	8.3	829	0	0	0	0
954	279	8.3	829	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
955	265	8.9	887	0	0	0	0
956	304	9.5	945	0	0	0	0
957	314	9.5	945	0	0	0	0
958	331	9.5	945	0	0	0	0
959	317	9.5	945	0	0	0	0
960	286	9.5	945	0	0	0	0
961	361	9.9	989	0	0	0	0
962	343	10.3	1032	0	0	0	0
963	341	10.3	1032	0	0	0	0
964	346	10.3	1032	0	0	0	0
965	318	10.4	1043	0	0	0	0
966	318	10.5	1053	0	0	0	0
967	299	10.5	1053	0	0	0	0
968	283	10.5	1053	0	0	0	0
969	292	10.5	1053	0	0	0	0
970	302	10.5	1053	0	0	0	0
971	405	10.5	1053	0	0	0	0
972	404	10.5	1053	0	0	0	0
973	317	10.4	1042	0	0	0	0
974	293	10.3	1030	0	0	0	0
975	289	10.3	1030	0	0	0	0
976	298	10.3	1030	0	0	0	0
977	287	10.1	1011	0	0	0	0
978	287	9.9	992	0	0	0	0
979	275	9.9	992	0	0	0	0
980	360	9.9	992	0	0	0	0
981	340	10.0	996	0	0	0	0
982	289	10.0	1000	0	0	0	0
983	235	10.0	1000	0	0	0	0
984	361	10.0	1000	0	0	0	0
985	354	10.0	1000	0	0	0	0
986	304	10.0	1000	0	0	0	0
987	378	10.1	1014	0	0	0	0
988	378	10.3	1028	0	0	0	0
989	308	10.3	1028	0	0	0	0
990	291	10.3	1028	0	0	0	0
991	298	10.4	1040	0	0	0	0
992	288	10.5	1051	0	0	0	0
993	328	10.5	1051	0	0	0	0
994	358	10.5	1051	0	0	0	0
995	309	10.5	1051	0	0	0	0
996	283	10.5	1051	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
997	307	10.5	1051	0	0	0	0
998	272	10.5	1051	0	0	0	0
999	272	6.5	648	0	0	0	0
1000	314	2.4	244	0	0	0	0
1001	239	2.4	244	0	0	0	0
1002	265	2.4	244	0	0	0	0
1003	143	0.7	74	0	0	0	0
1004	165	0.5	54	0	0	0	0
1005	236	0.5	54	0	0	0	0
1006	248	0.5	54	0	0	0	0
1007	231	0.4	44	0	0	0	0
1008	253	0.4	44	0	0	0	0
1009	261	0.4	44	0	0	0	0
1010	282	0.4	44	0	0	0	0
1011	277	0.4	42	0	0	0	0
1012	256	0.4	41	0	0	0	0
1013	361	0.4	41	0	0	0	0
1014	335	0.4	41	0	0	0	0
1015	323	0.4	41	0	0	0	0
1016	319	0.4	41	0	0	0	0
1017	324	0.5	47	0	0	0	0
1018	302	0.5	47	0	0	0	0
1019	362	0.5	47	0	0	0	0
1020	231	0.5	47	0	0	0	0
1021	250	0.5	47	0	0	0	0
1022	252	0.7	68	0	0	0	0
1023	256	0.7	68	0	0	0	0
1024	219	0.7	68	0	0	0	0
1025	247	0.7	68	0	0	0	0
1026	166	1.5	152	0	0	0	0
1027	240	1.5	152	0	0	0	0
1028	264	1.9	192	0	0	0	0
1029	244	2.3	231	0	0	0	0
1030	232	2.3	231	0	0	0	0
1031	215	3.6	358	0	0	0	0
1032	250	3.6	358	0	0	0	0
1033	366	3.6	358	0	0	0	0
1034	348	3.6	358	0	0	0	0
1035	389	3.8	376	0	0	0	0
1036	342	3.9	394	0	0	0	0
1037	354	3.9	394	0	0	0	0
1038	543	3.9	394	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1039	546	3.9	394	0	0	0	0
1040	520	3.9	394	0	0	0	0
1041	405	5.7	572	0	0	0	0
1042	544	5.7	572	0	0	0	0
1043	454	5.7	572	0	0	0	0
1044	585	5.7	572	0	0	0	0
1045	1028	5.7	572	0	0	0	0
1046	1019	5.7	572	0	0	0	0
1047	813	5.7	572	0	0	0	0
1048	378	7.4	735	0	0	0	0
1049	607	7.4	735	0	0	0	0
1050	462	7.4	735	0	0	0	0
1051	648	7.4	735	0	0	0	0
1052	442	7.4	735	0	0	0	0
1053	578	7.4	735	0	0	0	0
1054	1289	7.4	735	0	0	0	0
1055	1077	7.7	772	0	0	0	0
1056	231	8.1	808	0	0	0	0
1057	273	8.1	808	0	0	0	0
1058	209	8.1	808	0	0	0	0
1059	219	8.1	808	0	0	0	0
1060	245	8.1	808	0	0	0	0
1061	275	9.5	953	0	0	0	0
1062	203	9.5	953	0	0	0	0
1063	358	9.5	953	0	0	0	0
1064	312	10.7	1068	0	0	0	0
1065	260	11.8	1184	0	0	0	0
1066	272	11.8	1184	0	0	0	0
1067	299	11.8	1184	0	0	0	0
1068	274	14.0	1395	0	0	0	0
1069	236	14.0	1395	0	0	0	0
1070	261	14.0	1395	0	0	0	0
1071	236	14.0	1395	0	0	0	0
1072	246	14.0	1395	0	0	0	0
1073	289	14.7	1466	0	0	0	0
1074	343	14.7	1466	0	0	0	0
1075	329	14.7	1466	0	0	0	0
1076	256	14.7	1466	0	0	0	0
1077	284	14.7	1466	0	0	0	0
1078	298	14.7	1466	0	0	0	0
1079	376	14.6	1459	0	0	0	0
1080	436	14.6	1459	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1081	490	14.6	1459	0	0	0	0
1082	571	14.6	1459	0	0	0	0
1083	365	14.6	1459	0	0	0	0
1084	287	14.6	1460	0	0	0	0
1085	283	14.6	1460	0	0	0	0
1086	312	14.6	1460	0	0	0	0
1087	273	14.6	1460	0	0	0	0
1088	309	14.6	1460	0	0	0	0
1089	356	15.3	1528	0	0	0	0
1090	321	16.0	1596	0	0	0	0
1091	293	16.0	1596	0	0	0	0
1092	260	16.0	1596	0	0	0	0
1093	243	16.0	1596	0	0	0	0
1094	212	16.0	1596	0	0	0	0
1095	172	20.2	2016	0	0	0	0
1096	157	20.2	2016	0	0	0	0
1097	151	1.7	174	0	0	0	0
1098	116	1.8	183	0	0	0	0
1099	97	2.0	198	0	0	0	0
1100	111	2.0	198	0	0	0	0
1101	108	2.0	198	0	0	0	0
1102	102	1.9	194	0	0	0	0
1103	110	2.0	204	0	0	0	0
1104	74	2.0	204	0	0	0	0
1105	35	2.5	251	0	0	0	0
1106	112	2.5	251	0	0	0	0
1107	104	2.5	251	0	0	0	0
1108	106	3.1	306	0	0	0	0
1109	135	3.1	306	0	0	0	0
1110	127	3.6	364	0	0	0	0
1111	159	3.6	364	0	0	0	0
1112	167	3.6	364	0	0	0	0
1113	148	4.2	423	0	0	0	0
1114	160	4.2	423	0	0	0	0
1115	98	4.9	486	0	0	0	0
1116	108	4.9	486	0	0	0	0
1117	131	5.5	547	0	0	0	0
1118	135	5.5	547	0	0	0	0
1119	113	6.1	610	0	0	0	0
1120	96	6.7	666	0	0	0	0
1121	89	6.8	677	0	0	0	0
1122	103	6.9	687	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1123	117	6.9	687	0	0	0	0
1124	110	6.9	687	0	0	0	0
1125	106	6.9	686	0	0	0	0
1126	108	6.9	686	0	0	0	0
1127	106	6.8	675	0	0	0	0
1128	112	6.8	675	0	0	0	0
1129	126	6.5	651	0	0	0	0
1130	103	6.5	651	0	0	0	0
1131	110	6.3	625	0	0	0	0
1132	106	5.9	592	0	0	0	0
1133	96	5.9	592	0	0	0	0
1134	105	5.9	592	0	0	0	0
1135	137	5.8	577	0	0	0	0
1136	115	5.9	589	0	0	0	0
1137	117	5.9	589	0	0	0	0
1138	61	5.9	589	0	0	0	0
1139	257	6.0	596	0	0	0	0
1140	257	6.0	603	0	0	0	0
1141	260	6.0	603	0	0	0	0
1142	297	6.1	609	0	0	0	0
1143	295	6.1	614	0	0	0	0
1144	304	6.2	620	0	0	0	0
1145	238	6.2	620	0	0	0	0
1146	220	6.2	620	0	0	0	0
1147	185	6.2	620	0	0	0	0
1148	163	6.1	608	0	0	0	0
1149	190	6.1	612	0	0	0	0
1150	194	6.2	615	0	0	0	0
1151	186	6.2	615	0	0	0	0
1152	144	6.2	615	0	0	0	0
1153	164	8.1	810	0	0	0	0
1154	156	8.1	810	0	0	0	0
1155	163	11.1	1114	0	0	0	0
1156	138	12.0	1205	0	0	0	0
1157	122	13.0	1295	0	0	0	0
1158	120	13.0	1295	0	0	0	0
1159	196	13.0	1295	0	0	0	0
1160	189	13.0	1295	0	0	0	0
1161	238	13.0	1295	0	0	0	0
1162	252	12.9	1287	0	0	0	0
1163	222	12.8	1279	0	0	0	0
1164	252	12.7	1273	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1165	172	12.7	1266	0	0	0	0
1166	131	12.7	1266	0	0	0	0
1167	162	12.7	1266	0	0	0	0
1168	306	12.6	1262	0	0	0	0
1169	241	12.6	1258	0	0	0	0
1170	229	12.6	1258	0	0	0	0
1171	215	17.9	1794	0	0	0	0
1172	232	17.9	1794	0	0	0	0
1173	215	22.0	2195	0	0	0	0
1174	268	22.0	2195	0	0	0	0
1175	110	19.7	1968	0	0	0	0
1176	143	16.2	1622	0	0	0	0
1177	121	3.3	329	0	0	0	0
1178	120	3.3	329	0	0	0	0
1179	45	3.3	329	0	0	0	0
1180	165	3.1	307	0	0	0	0
1181	177	3.1	307	0	0	0	0
1182	186	3.1	307	0	0	0	0
1183	150	2.8	282	0	0	0	0
1184	152	2.8	282	0	0	0	0
1185	160	2.9	285	0	0	0	0
1186	99	2.9	285	0	0	0	0
1187	160	3.2	322	0	0	0	0
1188	148	3.2	322	0	0	0	0
1189	204	3.2	322	0	0	0	0
1190	186	3.7	374	0	0	0	0
1191	139	3.7	374	0	0	0	0
1192	130	3.7	374	0	0	0	0
1193	196	4.9	486	0	0	0	0
1194	207	4.9	486	0	0	0	0
1195	177	4.9	486	0	0	0	0
1196	185	5.8	576	0	0	0	0
1197	197	5.8	576	0	0	0	0
1198	177	6.1	608	0	0	0	0
1199	238	6.4	640	0	0	0	0
1200	164	6.4	640	0	0	0	0
1201	157	6.4	640	0	0	0	0
1202	134	7.0	701	0	0	0	0
1203	165	7.0	701	0	0	0	0
1204	146	7.0	701	0	0	0	0
1205	143	7.5	751	0	0	0	0
1206	137	7.5	751	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1207	138	8.3	834	0	0	0	0
1208	138	9.4	944	0	0	0	0
1209	43	9.2	924	0	0	0	0
1210	177	9.2	924	0	0	0	0
1211	191	9.2	924	0	0	0	0
1212	217	9.1	913	0	0	0	0
1213	235	9.0	901	0	0	0	0
1214	221	9.0	901	0	0	0	0
1215	207	8.8	884	0	0	0	0
1216	184	8.7	866	0	0	0	0
1217	184	8.7	866	0	0	0	0
1218	260	8.7	866	0	0	0	0
1219	251	8.2	815	0	0	0	0
1220	305	8.2	815	0	0	0	0
1221	289	8.2	815	0	0	0	0
1222	276	8.2	815	0	0	0	0
1223	244	8.2	815	0	0	0	0
1224	244	8.0	799	0	0	0	0
1225	221	7.8	783	0	0	0	0
1226	274	7.8	783	0	0	0	0
1227	253	7.8	783	0	0	0	0
1228	271	7.8	781	0	0	0	0
1229	266	7.8	778	0	0	0	0
1230	225	7.8	778	0	0	0	0
1231	240	7.7	772	0	0	0	0
1232	210	7.7	766	0	0	0	0
1233	210	7.7	766	0	0	0	0
1234	274	7.7	766	0	0	0	0
1235	253	7.9	792	0	0	0	0
1236	260	7.9	792	0	0	0	0
1237	244	7.9	792	0	0	0	0
1238	278	8.4	836	0	0	0	0
1239	283	8.8	879	0	0	0	0
1240	282	8.8	879	0	0	0	0
1241	236	8.8	879	0	0	0	0
1242	239	8.8	879	0	0	0	0
1243	222	9.6	956	0	0	0	0
1244	241	9.6	956	0	0	0	0
1245	243	9.6	956	0	0	0	0
1246	235	10.2	1021	0	0	0	0
1247	221	10.9	1085	0	0	0	0
1248	203	10.9	1085	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1249	220	10.9	1085	0	0	0	0
1250	246	10.9	1085	0	0	0	0
1251	283	12.7	1266	0	0	0	0
1252	208	12.7	1266	0	0	0	0
1253	220	12.7	1266	0	0	0	0
1254	234	12.7	1266	0	0	0	0
1255	270	17.3	1729	0	0	0	0
1256	296	17.3	1729	0	0	0	0
1257	308	17.3	1729	0	0	0	0
1258	255	19.4	1937	0	0	0	0
1259	293	21.5	2145	0	0	0	0
1260	260	21.5	2145	0	0	0	0
1261	292	21.5	2145	0	0	0	0
1262	318	21.5	2145	0	0	0	0
1263	341	21.5	2145	0	0	0	0
1264	294	21.8	2179	0	0	0	0
1265	313	22.1	2213	0	0	0	0
1266	306	21.6	2158	0	0	0	0
1267	252	21.0	2102	0	0	0	0
1268	264	21.3	2133	0	0	0	0
1269	281	21.6	2164	0	0	0	0
1270	345	21.6	2164	0	0	0	0
1271	262	21.6	2164	0	0	0	0
1272	261	1.0	102	0	0	0	0
1273	237	0.6	64	0	0	0	0
1274	153	0.6	64	0	0	0	0
1275	228	0.6	64	0	0	0	0
1276	163	0.7	72	0	0	0	0
1277	159	0.7	72	0	0	0	0
1278	173	0.7	72	0	0	0	0
1279	153	0.7	72	0	0	0	0
1280	172	0.7	67	0	0	0	0
1281	101	0.6	62	0	0	0	0
1282	153	0.7	68	0	0	0	0
1283	150	0.7	68	0	0	0	0
1284	145	0.9	92	0	0	0	0
1285	144	0.9	92	0	0	0	0
1286	140	1.3	128	0	0	0	0
1287	149	1.3	128	0	0	0	0
1288	129	1.3	128	0	0	0	0
1289	146	1.7	168	0	0	0	0
1290	131	1.7	168	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1291	143	2.0	204	0	0	0	0
1292	136	2.0	204	0	0	0	0
1293	146	2.0	204	0	0	0	0
1294	140	2.5	245	0	0	0	0
1295	133	2.5	245	0	0	0	0
1296	133	2.9	293	0	0	0	0
1297	132	2.9	293	0	0	0	0
1298	137	3.6	363	0	0	0	0
1299	132	3.6	363	0	0	0	0
1300	121	4.3	433	0	0	0	0
1301	124	4.3	433	0	0	0	0
1302	121	4.3	433	0	0	0	0
1303	132	4.7	470	0	0	0	0
1304	136	4.7	470	0	0	0	0
1305	140	4.7	470	0	0	0	0
1306	137	4.9	486	0	0	0	0
1307	141	4.9	486	0	0	0	0
1308	149	4.9	493	0	0	0	0
1309	116	5.3	525	0	0	0	0
1310	145	5.3	531	0	0	0	0
1311	153	5.4	536	0	0	0	0
1312	267	5.4	536	0	0	0	0
1313	283	5.4	536	0	0	0	0
1314	264	5.4	536	0	0	0	0
1315	279	5.4	536	0	0	0	0
1316	260	5.3	532	0	0	0	0
1317	237	5.3	527	0	0	0	0
1318	253	5.3	527	0	0	0	0
1319	286	5.3	527	0	0	0	0
1320	262	5.3	527	0	0	0	0
1321	254	5.1	512	0	0	0	0
1322	211	5.0	497	0	0	0	0
1323	200	5.0	497	0	0	0	0
1324	133	4.7	474	0	0	0	0
1325	262	4.7	474	0	0	0	0
1326	306	4.7	474	0	0	0	0
1327	250	5.0	497	0	0	0	0
1328	216	5.2	519	0	0	0	0
1329	239	5.2	519	0	0	0	0
1330	222	5.2	519	0	0	0	0
1331	233	5.7	566	0	0	0	0
1332	218	6.1	612	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1333	246	6.1	612	0	0	0	0
1334	270	6.9	689	0	0	0	0
1335	242	7.7	766	0	0	0	0
1336	228	7.7	766	0	0	0	0
1337	288	7.7	766	0	0	0	0
1338	189	8.3	825	0	0	0	0
1339	295	8.8	884	0	0	0	0
1340	256	8.8	884	0	0	0	0
1341	208	8.8	884	0	0	0	0
1342	203	9.0	898	0	0	0	0
1343	236	9.1	911	0	0	0	0
1344	293	9.1	911	0	0	0	0
1345	217	9.1	911	0	0	0	0
1346	235	9.1	911	0	0	0	0
1347	221	9.1	908	0	0	0	0
1348	223	9.1	905	0	0	0	0
1349	236	9.7	967	0	0	0	0
1350	268	10.3	1028	0	0	0	0
1351	268	10.3	1028	0	0	0	0
1352	261	10.3	1028	0	0	0	0
1353	243	10.3	1028	0	0	0	0
1354	266	12.4	1243	0	0	0	0
1355	256	14.6	1458	0	0	0	0
1356	243	14.6	1458	0	0	0	0
1357	255	14.6	1458	0	0	0	0
1358	342	16.2	1624	0	0	0	0
1359	245	16.2	1624	0	0	0	0
1360	146	14.6	1455	0	0	0	0
1361	221	15.3	1519	4	0	0	0
1362	146	16.0	1583	8	0	0	0
1363	266	16.0	1583	8	0	0	0
1364	143	16.0	1583	8	0	0	0
1365	221	16.0	1583	8	0	0	0
1366	171	23.7	2352	11	0	0	0
1367	169	12.5	1243	6	0	0	0
1368	206	1.3	134	0	0	0	0
1369	94	1.3	133	0	0	0	0
1370	144	1.3	133	0	0	0	0
1371	156	1.2	117	0	0	0	0
1372	157	1.2	117	0	0	0	0
1373	151	1.2	117	0	0	0	0
1374	134	1.0	100	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1375	141	1.0	100	0	0	0	0
1376	150	1.0	101	0	0	0	0
1377	143	1.0	101	0	0	0	0
1378	168	1.0	101	0	0	0	0
1379	158	1.3	125	0	0	0	0
1380	129	1.3	125	0	0	0	0
1381	152	1.7	172	0	0	0	0
1382	139	1.7	172	0	0	0	0
1383	152	1.7	172	0	0	0	0
1384	160	2.3	228	0	0	0	0
1385	147	2.3	228	0	0	0	0
1386	143	2.9	292	0	0	0	0
1387	138	2.9	292	0	0	0	0
1388	138	3.6	362	0	0	0	0
1389	132	3.6	362	0	0	0	0
1390	145	3.6	362	0	0	0	0
1391	138	4.2	420	0	0	0	0
1392	137	4.2	420	0	0	0	0
1393	154	4.2	420	0	0	0	0
1394	150	4.8	478	0	0	0	0
1395	136	4.8	478	0	0	0	0
1396	148	5.1	509	0	0	0	0
1397	138	5.1	509	0	0	0	0
1398	146	5.5	549	0	0	0	0
1399	146	5.5	549	0	0	0	0
1400	136	5.5	549	0	0	0	0
1401	140	6.4	639	0	0	0	0
1402	139	6.4	639	0	0	0	0
1403	131	6.5	646	0	0	0	0
1404	158	6.5	646	0	0	0	0
1405	144	6.5	646	0	0	0	0
1406	108	6.3	634	0	0	0	0
1407	126	6.3	634	0	0	0	0
1408	162	6.3	630	0	0	0	0
1409	169	6.3	625	0	0	0	0
1410	170	6.3	625	0	0	0	0
1411	189	6.1	612	0	0	0	0
1412	186	6.1	612	0	0	0	0
1413	195	6.1	612	0	0	0	0
1414	163	6.0	595	0	0	0	0
1415	183	6.0	595	0	0	0	0
1416	216	6.0	595	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1417	205	7.0	701	0	0	0	0
1418	189	8.0	803	0	0	0	0
1419	229	8.0	803	0	0	0	0
1420	288	8.0	803	0	0	0	0
1421	300	8.0	803	0	0	0	0
1422	303	8.8	878	0	0	0	0
1423	289	9.5	954	0	0	0	0
1424	280	9.5	954	0	0	0	0
1425	233	10.2	1020	0	0	0	0
1426	279	10.9	1085	0	0	0	0
1427	273	10.9	1085	0	0	0	0
1428	273	10.9	1085	0	0	0	0
1429	258	11.2	1122	0	0	0	0
1430	256	11.6	1160	0	0	0	0
1431	227	11.6	1160	0	0	0	0
1432	214	11.6	1160	0	0	0	0
1433	261	11.6	1160	0	0	0	0
1434	307	11.6	1160	0	0	0	0
1435	285	13.3	1334	0	0	0	0
1436	268	15.1	1509	0	0	0	0
1437	230	15.1	1509	0	0	0	0
1438	258	17.7	1762	5	0	0	0
1439	317	20.3	2014	10	0	0	0
1440	326	20.3	2014	10	0	0	0
1441	301	20.3	2014	10	0	0	0
1442	337	20.3	2014	10	0	0	0
1443	297	20.3	2014	10	0	0	0
1444	261	21.9	2166	10	0	0	0
1445	278	23.4	2317	11	0	0	0
1446	233	23.4	2317	11	0	0	0
1447	301	23.4	2317	11	0	0	0
1448	313	25.7	2546	12	0	0	0
1449	298	28.0	2776	13	0	0	0
1450	294	28.0	2776	13	0	0	0
1451	257	28.0	2776	13	0	0	0
1452	243	29.1	2879	14	0	0	0
1453	245	27.1	2688	13	0	0	0
1454	252	25.2	2498	12	0	0	0
1455	234	25.2	2498	12	0	0	0
1456	233	25.2	2498	12	0	0	0
1457	242	24.3	2402	12	0	0	0
1458	225	23.3	2305	12	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1459	248	23.3	2305	12	0	0	0
1460	170	26.1	2585	13	0	0	0
1461	255	28.9	2865	14	0	0	0
1462	234	2.0	196	0	0	0	0
1463	125	1.2	123	0	0	0	0
1464	119	1.2	123	0	0	0	0
1465	130	1.0	101	0	0	0	0
1466	106	1.0	101	0	0	0	0
1467	154	0.9	92	0	0	0	0
1468	118	0.9	92	0	0	0	0
1469	137	0.9	93	0	0	0	0
1470	142	1.1	109	0	0	0	0
1471	116	1.1	109	0	0	0	0
1472	95	1.1	109	0	0	0	0
1473	151	1.3	133	0	0	0	0
1474	135	1.3	133	0	0	0	0
1475	126	1.7	167	0	0	0	0
1476	140	1.7	167	0	0	0	0
1477	151	1.7	167	0	0	0	0
1478	132	2.0	204	0	0	0	0
1479	143	2.0	204	0	0	0	0
1480	151	2.4	243	0	0	0	0
1481	147	2.4	243	0	0	0	0
1482	137	2.4	243	0	0	0	0
1483	145	3.0	298	0	0	0	0
1484	187	3.0	298	0	0	0	0
1485	151	3.5	352	0	0	0	0
1486	134	3.5	352	0	0	0	0
1487	101	4.1	413	0	0	0	0
1488	148	4.1	413	0	0	0	0
1489	137	4.1	413	0	0	0	0
1490	131	4.7	473	0	0	0	0
1491	135	5.4	543	0	0	0	0
1492	76	5.4	543	0	0	0	0
1493	113	5.4	543	0	0	0	0
1494	114	5.7	570	0	0	0	0
1495	119	5.7	570	0	0	0	0
1496	157	5.8	575	0	0	0	0
1497	131	5.8	580	0	0	0	0
1498	135	5.8	580	0	0	0	0
1499	150	5.9	590	0	0	0	0
1500	136	6.0	595	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1501	99	6.0	595	0	0	0	0
1502	91	6.0	595	0	0	0	0
1503	162	7.0	701	0	0	0	0
1504	178	8.0	803	0	0	0	0
1505	172	8.0	803	0	0	0	0
1506	186	8.0	803	0	0	0	0
1507	189	8.0	803	0	0	0	0
1508	186	8.8	878	0	0	0	0
1509	180	9.5	954	0	0	0	0
1510	158	9.5	954	0	0	0	0
1511	251	10.2	1020	0	0	0	0
1512	188	7.6	758	0	0	0	0
1513	196	10.7	1068	0	0	0	0
1514	201	10.7	1068	0	0	0	0
1515	215	10.7	1068	0	0	0	0
1516	252	10.7	1068	0	0	0	0
1517	270	10.7	1068	0	0	0	0
1518	245	10.6	1059	0	0	0	0
1519	243	10.6	1059	0	0	0	0
1520	219	10.6	1059	0	0	0	0
1521	284	10.6	1059	0	0	0	0
1522	270	10.8	1076	0	0	0	0
1523	308	10.8	1076	0	0	0	0
1524	287	10.8	1076	0	0	0	0
1525	290	10.8	1076	0	0	0	0
1526	308	10.6	1056	0	0	0	0
1527	257	10.4	1037	0	0	0	0
1528	245	10.4	1037	0	0	0	0
1529	277	10.4	1037	0	0	0	0
1530	255	10.4	1037	0	0	0	0
1531	260	10.1	1014	0	0	0	0
1532	249	10.1	1014	0	0	0	0
1533	246	10.1	1014	0	0	0	0
1534	286	10.1	1014	0	0	0	0
1535	321	10.9	1089	0	0	0	0
1536	292	10.9	1089	0	0	0	0
1537	300	10.9	1089	0	0	0	0
1538	273	12.2	1221	0	0	0	0
1539	261	13.5	1353	0	0	0	0
1540	239	13.5	1353	0	0	0	0
1541	281	13.5	1353	0	0	0	0
1542	330	13.5	1353	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1543	248	13.5	1353	0	0	0	0
1544	273	16.5	1650	0	0	0	0
1545	260	16.5	1650	0	0	0	0
1546	234	16.5	1650	0	0	0	0
1547	264	17.7	1762	4	0	0	0
1548	253	18.9	1875	9	0	0	0
1549	253	18.9	1875	9	0	0	0
1550	296	18.9	1875	9	0	0	0
1551	241	19.7	1954	9	0	0	0
1552	239	20.5	2034	9	0	0	0
1553	261	20.5	2034	9	0	0	0
1554	261	20.5	2034	9	0	0	0
1555	251	22.9	2274	10	0	0	0
1556	204	23.9	2373	10	0	0	0
1557	179	23.9	2373	10	0	0	0
1558	1	2.9	289	0	0	0	0
1559	148	2.7	272	0	0	0	0
1560	103	2.7	272	0	0	0	0
1561	145	2.7	272	0	0	0	0
1562	157	2.6	256	0	0	0	0
1563	160	2.6	256	0	0	0	0
1564	161	2.6	256	0	0	0	0
1565	166	2.7	271	0	0	0	0
1566	161	3.1	308	0	0	0	0
1567	120	3.1	308	0	0	0	0
1568	171	3.1	308	0	0	0	0
1569	200	3.1	308	0	0	0	0
1570	184	3.0	295	0	0	0	0
1571	173	3.0	295	0	0	0	0
1572	205	3.0	295	0	0	0	0
1573	181	2.6	259	0	0	0	0
1574	169	2.6	259	0	0	0	0
1575	179	2.6	259	0	0	0	0
1576	167	2.5	253	0	0	0	0
1577	358	2.5	247	0	0	0	0
1578	196	2.6	258	0	0	0	0
1579	257	2.6	258	0	0	0	0
1580	172	2.6	258	0	0	0	0
1581	190	2.7	272	0	0	0	0
1582	188	2.9	285	0	0	0	0
1583	208	3.1	310	0	0	0	0
1584	217	3.3	334	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1585	161	3.3	334	0	0	0	0
1586	188	3.3	334	0	0	0	0
1587	159	3.6	358	0	0	0	0
1588	187	3.8	382	0	0	0	0
1589	167	3.8	382	0	0	0	0
1590	198	4.4	436	0	0	0	0
1591	199	4.4	436	0	0	0	0
1592	166	4.4	436	0	0	0	0
1593	178	4.4	436	0	0	0	0
1594	166	4.9	494	0	0	0	0
1595	148	4.9	494	0	0	0	0
1596	171	5.4	539	0	0	0	0
1597	171	5.4	539	0	0	0	0
1598	164	5.6	561	0	0	0	0
1599	150	5.6	561	0	0	0	0
1600	155	5.6	561	0	0	0	0
1601	179	5.6	561	0	0	0	0
1602	201	5.7	571	0	0	0	0
1603	211	5.8	581	0	0	0	0
1604	138	5.8	581	0	0	0	0
1605	188	6.0	597	0	0	0	0
1606	167	6.5	646	0	0	0	0
1607	198	7.0	696	0	0	0	0
1608	210	7.0	696	0	0	0	0
1609	370	7.0	696	0	0	0	0
1610	362	7.0	697	0	0	0	0
1611	379	7.0	698	0	0	0	0
1612	421	7.0	699	0	0	0	0
1613	344	7.0	699	0	0	0	0
1614	351	7.0	699	0	0	0	0
1615	399	7.0	699	0	0	0	0
1616	530	7.0	699	0	0	0	0
1617	876	7.0	699	0	0	0	0
1618	424	7.0	699	0	0	0	0
1619	348	7.0	699	0	0	0	0
1620	441	6.8	683	0	0	0	0
1621	430	6.7	667	0	0	0	0
1622	322	6.7	667	0	0	0	0
1623	279	6.7	667	0	0	0	0
1624	313	6.6	657	0	0	0	0
1625	334	6.5	647	0	0	0	0
1626	284	6.5	647	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1627	271	6.5	647	0	0	0	0
1628	293	6.7	668	0	0	0	0
1629	296	6.9	690	0	0	0	0
1630	313	7.1	711	0	0	0	0
1631	416	7.1	711	0	0	0	0
1632	465	7.1	711	0	0	0	0
1633	392	7.1	711	0	0	0	0
1634	307	7.1	711	0	0	0	0
1635	324	7.1	711	0	0	0	0
1636	388	7.1	711	0	0	0	0
1637	206	7.5	752	0	0	0	0
1638	323	7.9	794	0	0	0	0
1639	419	8.4	835	0	0	0	0
1640	293	8.4	835	0	0	0	0
1641	409	8.4	835	0	0	0	0
1642	393	8.4	835	0	0	0	0
1643	350	8.4	835	0	0	0	0
1644	366	8.7	867	0	0	0	0
1645	423	9.0	900	0	0	0	0
1646	396	9.3	932	0	0	0	0
1647	345	9.3	932	0	0	0	0
1648	318	9.3	932	0	0	0	0
1649	315	9.3	932	0	0	0	0
1650	354	9.3	932	0	0	0	0
1651	380	6.8	682	0	0	0	0
1652	260	4.3	432	0	0	0	0
1653	260	3.3	331	0	0	0	0
1654	184	3.2	318	0	0	0	0
1655	201	3.1	305	0	0	0	0
1656	187	3.1	305	0	0	0	0
1657	206	3.0	300	0	0	0	0
1658	182	2.9	294	0	0	0	0
1659	177	2.9	294	0	0	0	0
1660	179	3.0	303	0	0	0	0
1661	193	3.0	303	0	0	0	0
1662	172	3.0	303	0	0	0	0
1663	170	3.2	319	0	0	0	0
1664	166	3.4	335	0	0	0	0
1665	173	3.4	335	0	0	0	0
1666	160	4.1	411	0	0	0	0
1667	189	4.1	411	0	0	0	0
1668	179	4.7	471	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1669	210	5.3	531	0	0	0	0
1670	213	5.3	531	0	0	0	0
1671	256	5.3	531	0	0	0	0
1672	203	6.8	675	0	0	0	0
1673	163	6.8	675	0	0	0	0
1674	160	6.8	675	0	0	0	0
1675	195	7.4	742	0	0	0	0
1676	209	8.1	808	0	0	0	0
1677	215	8.1	808	0	0	0	0
1678	225	8.4	842	0	0	0	0
1679	201	8.8	876	0	0	0	0
1680	227	8.8	876	0	0	0	0
1681	225	8.8	876	0	0	0	0
1682	206	9.3	930	0	0	0	0
1683	175	9.3	930	0	0	0	0
1684	229	9.3	930	0	0	0	0
1685	213	9.7	974	0	0	0	0
1686	164	10.2	1019	0	0	0	0
1687	157	10.2	1019	0	0	0	0
1688	147	10.7	1074	0	0	0	0
1689	132	10.7	1074	0	0	0	0
1690	161	11.1	1105	0	0	0	0
1691	170	11.4	1136	0	0	0	0
1692	190	11.4	1136	0	0	0	0
1693	167	11.9	1190	0	0	0	0
1694	184	12.4	1244	0	0	0	0
1695	187	12.4	1244	0	0	0	0
1696	183	13.3	1325	0	0	0	0
1697	169	14.1	1406	0	0	0	0
1698	216	14.1	1406	0	0	0	0
1699	204	14.1	1406	0	0	0	0
1700	226	16.5	1646	0	0	0	0
1701	211	18.9	1885	0	0	0	0
1702	232	19.6	1962	0	0	0	0
1703	296	20.4	2039	0	0	0	0
1704	316	21.2	2116	0	0	0	0
1705	357	21.2	2116	0	0	0	0
1706	379	21.2	2116	0	0	0	0
1707	362	22.0	2199	0	0	0	0
1708	385	22.8	2282	0	0	0	0
1709	325	23.7	2365	0	0	0	0
1710	349	23.7	2365	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1711	372	23.7	2365	0	0	0	0
1712	350	23.7	2365	0	0	0	0
1713	300	25.0	2496	0	0	0	0
1714	279	26.3	2627	0	0	0	0
1715	280	26.3	2627	0	0	0	0
1716	296	26.3	2627	0	0	0	0
1717	329	26.3	2627	0	0	0	0
1718	319	26.3	2627	0	0	0	0
1719	269	26.3	2627	0	0	0	0
1720	300	28.7	2851	9	0	0	0
1721	388	28.7	2851	9	0	0	0
1722	373	28.7	2851	9	0	0	0
1723	350	28.7	2851	9	0	0	0
1724	311	28.7	2851	9	0	0	0
1725	325	32.8	3259	10	0	0	0
1726	345	32.8	3259	10	0	0	0
1727	357	32.8	3259	10	0	0	0
1728	365	32.8	3259	10	0	0	0
1729	394	32.8	3259	10	0	0	0
1730	398	37.3	3712	11	0	0	0
1731	402	37.3	3712	11	0	0	0
1732	321	37.3	3712	11	0	0	0
1733	371	37.3	3712	11	0	0	0
1734	398	37.3	3712	11	0	0	0
1735	370	37.6	3739	11	0	0	0
1736	325	37.9	3767	11	0	0	0
1737	279	38.2	3794	11	0	0	0
1738	353	38.2	3794	11	0	0	0
1739	354	38.1	3794	10	0	0	0
1740	276	38.1	3794	10	0	0	0
1741	283	38.2	3794	11	0	0	0
1742	298	35.5	3527	10	0	0	0
1743	284	35.5	3527	10	0	0	0
1744	244	18.5	1836	5	0	0	0
1745	213	1.5	145	0	0	0	0
1746	213	1.5	145	0	0	0	0
1747	246	1.4	141	0	0	0	0
1748	222	1.4	137	0	0	0	0
1749	251	1.4	137	0	0	0	0
1750	237	1.4	137	0	0	0	0
1751	133	1.3	126	0	0	0	0
1752	168	1.3	126	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1753	162	1.2	122	0	0	0	0
1754	113	1.3	126	0	0	0	0
1755	112	1.3	126	0	0	0	0
1756	162	1.3	133	0	0	0	0
1757	237	1.4	139	0	0	0	0
1758	245	1.4	139	0	0	0	0
1759	232	1.4	139	0	0	0	0
1760	222	1.5	147	0	0	0	0
1761	223	1.5	154	0	0	0	0
1762	222	1.5	154	0	0	0	0
1763	188	1.5	154	0	0	0	0
1764	197	1.7	171	0	0	0	0
1765	206	1.7	171	0	0	0	0
1766	204	1.7	171	0	0	0	0
1767	196	1.9	191	0	0	0	0
1768	209	2.1	211	0	0	0	0
1769	179	2.1	211	0	0	0	0
1770	188	2.2	222	0	0	0	0
1771	180	2.2	222	0	0	0	0
1772	192	2.2	222	0	0	0	0
1773	213	2.3	231	0	0	0	0
1774	145	2.4	240	0	0	0	0
1775	173	2.4	240	0	0	0	0
1776	129	2.5	248	0	0	0	0
1777	188	2.6	256	0	0	0	0
1778	199	2.8	275	0	0	0	0
1779	174	2.9	287	0	0	0	0
1780	119	3.0	299	0	0	0	0
1781	176	3.0	299	0	0	0	0
1782	168	3.2	315	0	0	0	0
1783	157	3.3	331	0	0	0	0
1784	154	3.3	331	0	0	0	0
1785	141	3.6	364	0	0	0	0
1786	124	3.6	364	0	0	0	0
1787	96	3.9	385	0	0	0	0
1788	132	4.0	400	0	0	0	0
1789	168	4.0	400	0	0	0	0
1790	115	4.1	406	0	0	0	0
1791	147	4.1	412	0	0	0	0
1792	144	4.2	424	0	0	0	0
1793	49	4.2	424	0	0	0	0
1794	100	4.4	436	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1795	195	4.5	447	0	0	0	0
1796	167	4.5	451	0	0	0	0
1797	252	4.6	455	0	0	0	0
1798	170	4.6	455	0	0	0	0
1799	320	4.6	455	0	0	0	0
1800	375	4.6	455	0	0	0	0
1801	302	4.6	455	0	0	0	0
1802	366	4.7	467	0	0	0	0
1803	354	4.8	478	0	0	0	0
1804	318	4.8	478	0	0	0	0
1805	329	4.8	478	0	0	0	0
1806	344	4.8	478	0	0	0	0
1807	351	5.0	495	0	0	0	0
1808	330	5.1	512	0	0	0	0
1809	320	5.1	512	0	0	0	0
1810	384	5.1	512	0	0	0	0
1811	371	5.3	528	0	0	0	0
1812	366	5.4	543	0	0	0	0
1813	321	5.4	543	0	0	0	0
1814	291	5.4	543	0	0	0	0
1815	320	5.4	543	0	0	0	0
1816	350	5.4	543	0	0	0	0
1817	345	5.4	543	0	0	0	0
1818	324	5.5	546	0	0	0	0
1819	398	5.5	550	0	0	0	0
1820	312	5.5	553	0	0	0	0
1821	364	5.5	553	0	0	0	0
1822	350	5.5	553	0	0	0	0
1823	368	5.5	553	0	0	0	0
1824	392	5.5	553	0	0	0	0
1825	357	5.5	552	0	0	0	0
1826	299	5.5	550	0	0	0	0
1827	354	5.5	550	0	0	0	0
1828	327	5.5	550	0	0	0	0
1829	303	5.5	550	0	0	0	0
1830	309	5.3	528	0	0	0	0
1831	328	5.1	505	0	0	0	0
1832	305	5.1	505	0	0	0	0
1833	263	5.1	505	0	0	0	0
1834	264	5.3	529	0	0	0	0
1835	246	5.3	529	0	0	0	0
1836	241	5.3	529	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1837	256	5.8	577	0	0	0	0
1838	222	6.3	625	0	0	0	0
1839	211	6.3	625	0	0	0	0
1840	214	6.3	625	0	0	0	0
1841	188	4.3	430	0	0	0	0
1842	293	1.7	174	0	0	0	0
1843	250	1.7	174	0	0	0	0
1844	169	1.6	164	0	0	0	0
1845	172	1.6	164	0	0	0	0
1846	100	1.4	144	0	0	0	0
1847	68	1.4	144	0	0	0	0
1848	70	1.5	150	0	0	0	0
1849	75	1.6	163	0	0	0	0
1850	77	1.6	163	0	0	0	0
1851	109	3.0	295	0	0	0	0
1852	89	3.0	295	0	0	0	0
1853	104	4.7	466	0	0	0	0
1854	84	4.7	466	0	0	0	0
1855	130	2.7	274	0	0	0	0
1856	135	2.7	274	0	0	0	0
1857	130	2.6	264	0	0	0	0
1858	123	2.6	264	0	0	0	0
1859	113	2.5	249	0	0	0	0
1860	91	2.5	249	0	0	0	0
1861	110	2.5	246	0	0	0	0
1862	98	2.5	249	0	0	0	0
1863	111	2.5	249	0	0	0	0
1864	113	2.5	249	0	0	0	0
1865	72	2.5	248	0	0	0	0
1866	131	2.5	248	0	0	0	0
1867	140	2.5	248	0	0	0	0
1868	143	2.5	250	0	0	0	0
1869	172	2.5	252	0	0	0	0
1870	123	2.7	266	0	0	0	0
1871	104	2.7	266	0	0	0	0
1872	110	2.8	280	0	0	0	0
1873	83	2.8	280	0	0	0	0
1874	100	2.9	292	0	0	0	0
1875	61	2.9	292	0	0	0	0
1876	102	3.0	303	0	0	0	0
1877	99	3.2	315	0	0	0	0
1878	65	3.2	323	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1879	76	3.3	332	0	0	0	0
1880	69	3.5	346	0	0	0	0
1881	70	3.5	346	0	0	0	0
1882	30	3.9	393	0	0	0	0
1883	37	4.2	418	0	0	0	0
1884	80	4.3	427	0	0	0	0
1885	67	4.3	427	0	0	0	0
1886	75	4.2	419	0	0	0	0
1887	70	4.2	419	0	0	0	0
1888	89	4.0	397	0	0	0	0
1889	79	3.8	376	0	0	0	0
1890	75	3.8	379	0	0	0	0
1891	87	3.8	381	0	0	0	0
1892	87	3.8	381	0	0	0	0
1893	142	3.8	381	0	0	0	0
1894	245	4.0	397	0	0	0	0
1895	270	4.1	412	0	0	0	0
1896	281	4.1	412	0	0	0	0
1897	310	4.1	412	0	0	0	0
1898	392	4.2	416	0	0	0	0
1899	257	4.2	419	0	0	0	0
1900	327	4.2	419	0	0	0	0
1901	374	4.2	419	0	0	0	0
1902	340	4.2	419	0	0	0	0
1903	290	4.2	419	0	0	0	0
1904	295	4.2	419	0	0	0	0
1905	302	4.2	419	0	0	0	0
1906	270	4.1	408	0	0	0	0
1907	273	4.0	397	0	0	0	0
1908	209	3.9	390	0	0	0	0
1909	214	3.8	383	0	0	0	0
1910	249	3.8	383	0	0	0	0
1911	313	3.8	383	0	0	0	0
1912	324	3.9	385	0	0	0	0
1913	313	3.9	387	0	0	0	0
1914	224	3.9	387	0	0	0	0
1915	311	3.9	387	0	0	0	0
1916	306	4.0	396	0	0	0	0
1917	237	4.1	405	0	0	0	0
1918	234	4.1	405	0	0	0	0
1919	235	4.1	405	0	0	0	0
1920	232	4.1	405	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1921	260	4.3	432	0	0	0	0
1922	246	4.3	432	0	0	0	0
1923	210	4.3	432	0	0	0	0
1924	224	4.4	444	0	0	0	0
1925	201	4.6	455	0	0	0	0
1926	183	4.6	455	0	0	0	0
1927	196	4.8	481	0	0	0	0
1928	190	5.1	507	0	0	0	0
1929	208	5.1	507	0	0	0	0
1930	143	5.8	578	0	0	0	0
1931	149	5.8	578	0	0	0	0
1932	179	5.8	578	0	0	0	0
1933	90	5.7	571	0	0	0	0
1934	157	5.7	571	0	0	0	0
1935	161	5.7	571	0	0	0	0
1936	106	5.4	540	0	0	0	0
1937	113	5.4	540	0	0	0	0
1938	124	2.8	284	0	0	0	0
1939	116	1.5	148	0	0	0	0
1940	57	1.6	159	0	0	0	0
1941	141	1.6	159	0	0	0	0
1942	133	1.7	171	0	0	0	0
1943	111	1.7	171	0	0	0	0
1944	122	1.9	193	0	0	0	0
1945	140	1.9	193	0	0	0	0
1946	107	2.3	227	0	0	0	0
1947	95	2.3	227	0	0	0	0
1948	101	2.8	283	0	0	0	0
1949	113	2.8	283	0	0	0	0
1950	120	3.4	344	0	0	0	0
1951	104	3.4	344	0	0	0	0
1952	122	3.9	391	0	0	0	0
1953	106	3.9	391	0	0	0	0
1954	105	4.8	476	0	0	0	0
1955	78	5.3	533	0	0	0	0
1956	120	5.3	533	0	0	0	0
1957	224	5.3	533	0	0	0	0
1958	234	5.5	554	0	0	0	0
1959	256	5.8	575	0	0	0	0
1960	284	5.8	575	0	0	0	0
1961	273	5.8	575	0	0	0	0
1962	295	6.0	600	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1963	302	6.2	624	0	0	0	0
1964	284	6.2	624	0	0	0	0
1965	317	6.2	624	0	0	0	0
1966	281	6.2	624	0	0	0	0
1967	271	6.4	641	0	0	0	0
1968	281	6.6	658	0	0	0	0
1969	324	6.6	658	0	0	0	0
1970	309	6.6	658	0	0	0	0
1971	298	6.6	658	0	0	0	0
1972	350	6.6	658	0	0	0	0
1973	362	6.9	689	0	0	0	0
1974	307	7.2	720	0	0	0	0
1975	262	7.2	720	0	0	0	0
1976	230	7.2	720	0	0	0	0
1977	243	7.6	762	0	0	0	0
1978	260	8.0	803	0	0	0	0
1979	276	8.0	803	0	0	0	0
1980	325	8.0	803	0	0	0	0
1981	265	8.7	867	0	0	0	0
1982	255	9.3	930	0	0	0	0
1983	195	9.3	930	0	0	0	0
1984	204	10.2	1020	0	0	0	0
1985	188	11.1	1110	0	0	0	0
1986	207	11.1	1110	0	0	0	0
1987	231	11.1	1110	0	0	0	0
1988	223	11.9	1187	0	0	0	0
1989	207	12.6	1263	0	0	0	0
1990	212	12.6	1263	0	0	0	0
1991	246	12.6	1263	0	0	0	0
1992	238	12.6	1263	0	0	0	0
1993	238	13.0	1301	0	0	0	0
1994	250	13.4	1338	0	0	0	0
1995	236	13.4	1338	0	0	0	0
1996	264	13.4	1338	0	0	0	0
1997	193	13.4	1335	0	0	0	0
1998	200	13.3	1332	0	0	0	0
1999	239	13.3	1332	0	0	0	0
2000	270	13.3	1332	0	0	0	0
2001	260	13.3	1332	0	0	0	0
2002	267	12.9	1291	0	0	0	0
2003	243	12.5	1250	0	0	0	0
2004	294	12.5	1250	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2005	298	12.5	1250	0	0	0	0
2006	298	12.3	1229	0	0	0	0
2007	281	12.1	1208	0	0	0	0
2008	240	12.1	1208	0	0	0	0
2009	251	12.1	1208	0	0	0	0
2010	327	12.4	1239	0	0	0	0
2011	260	12.7	1269	0	0	0	0
2012	257	12.7	1269	0	0	0	0
2013	236	12.7	1269	0	0	0	0
2014	209	14.6	1462	0	0	0	0
2015	259	14.6	1462	0	0	0	0
2016	223	14.6	1462	0	0	0	0
2017	214	15.4	1539	0	0	0	0
2018	229	16.2	1615	0	0	0	0
2019	174	16.2	1615	0	0	0	0
2020	223	16.2	1615	0	0	0	0
2021	131	17.1	1709	0	0	0	0
2022	176	17.1	1709	0	0	0	0
2023	204	17.1	1709	0	0	0	0
2024	190	16.8	1682	0	0	0	0
2025	238	16.3	1627	0	0	0	0
2026	171	15.7	1571	0	0	0	0
2027	131	15.3	1527	0	0	0	0
2028	193	14.8	1482	0	0	0	0
2029	205	15.2	1516	0	0	0	0
2030	150	15.2	1516	0	0	0	0
2031	112	15.2	1516	0	0	0	0
2032	141	13.4	1342	0	0	0	0
2033	145	3.1	312	0	0	0	0
2034	159	4.5	452	0	0	0	0
2035	82	4.5	452	0	0	0	0
2036	104	5.4	542	0	0	0	0
2037	92	6.5	652	0	0	0	0
2038	60	6.7	674	0	0	0	0
2039	63	6.9	693	0	0	0	0
2040	27	6.7	668	0	0	0	0
2041	31	7.1	709	0	0	0	0
2042	48	7.2	718	0	0	0	0
2043	29	7.2	718	0	0	0	0
2044	90	7.2	721	0	0	0	0
2045	87	7.2	721	0	0	0	0
2046	82	7.6	756	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2047	83	7.9	791	0	0	0	0
2048	68	8.0	798	0	0	0	0
2049	75	8.0	798	0	0	0	0
2050	73	8.0	796	0	0	0	0
2051	66	7.8	784	0	0	0	0
2052	52	7.8	777	0	0	0	0
2053	62	7.8	781	0	0	0	0
2054	60	8.0	799	0	0	0	0
2055	70	8.5	845	0	0	0	0
2056	53	8.7	874	0	0	0	0
2057	45	8.7	874	0	0	0	0
2058	32	8.9	893	0	0	0	0
2059	64	8.9	893	0	0	0	0
2060	119	9.3	929	0	0	0	0
2061	88	9.6	962	0	0	0	0
2062	84	9.6	962	0	0	0	0
2063	106	10.1	1007	0	0	0	0
2064	107	10.1	1007	0	0	0	0
2065	112	10.6	1057	0	0	0	0
2066	89	10.8	1075	0	0	0	0
2067	77	10.8	1075	0	0	0	0
2068	69	10.7	1070	0	0	0	0
2069	34	10.4	1043	0	0	0	0
2070	64	10.0	998	0	0	0	0
2071	52	9.6	956	0	0	0	0
2072	22	9.6	956	0	0	0	0
2073	295	9.6	956	0	0	0	0
2074	297	11.0	1103	0	0	0	0
2075	250	12.5	1250	0	0	0	0
2076	254	12.5	1250	0	0	0	0
2077	287	12.5	1250	0	0	0	0
2078	267	12.5	1250	0	0	0	0
2079	313	13.7	1367	0	0	0	0
2080	272	14.8	1483	0	0	0	0
2081	285	14.8	1483	0	0	0	0
2082	354	14.8	1483	0	0	0	0
2083	281	14.8	1483	0	0	0	0
2084	276	14.8	1483	0	0	0	0
2085	368	15.1	1513	0	0	0	0
2086	320	15.4	1542	0	0	0	0
2087	288	15.4	1542	0	0	0	0
2088	334	15.4	1542	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2089	287	15.4	1544	0	0	0	0
2090	290	15.5	1547	0	0	0	0
2091	316	15.5	1549	0	0	0	0
2092	310	15.5	1549	0	0	0	0
2093	300	15.5	1549	0	0	0	0
2094	296	15.6	1559	0	0	0	0
2095	269	15.7	1568	0	0	0	0
2096	326	15.7	1568	0	0	0	0
2097	284	15.7	1568	0	0	0	0
2098	317	15.7	1568	0	0	0	0
2099	291	15.7	1568	0	0	0	0
2100	358	16.1	1609	0	0	0	0
2101	259	16.1	1609	0	0	0	0
2102	304	16.1	1609	0	0	0	0
2103	261	16.2	1624	0	0	0	0
2104	232	16.4	1639	0	0	0	0
2105	242	16.4	1639	0	0	0	0
2106	229	16.4	1639	0	0	0	0
2107	241	17.8	1778	0	0	0	0
2108	230	17.8	1778	0	0	0	0
2109	229	17.8	1778	0	0	0	0
2110	286	17.8	1778	0	0	0	0
2111	309	18.7	1875	0	0	0	0
2112	339	19.7	1971	0	0	0	0
2113	279	20.7	2068	0	0	0	0
2114	244	20.7	2068	0	0	0	0
2115	224	20.7	2068	0	0	0	0
2116	225	22.0	2195	0	0	0	0
2117	272	23.2	2322	0	0	0	0
2118	232	23.2	2322	0	0	0	0
2119	232	23.2	2322	0	0	0	0
2120	203	23.2	2322	0	0	0	0
2121	194	23.2	2319	0	0	0	0
2122	179	23.2	2319	0	0	0	0
2123	218	23.2	2319	0	0	0	0
2124	241	21.7	2168	0	0	0	0
2125	245	20.2	2017	0	0	0	0
2126	251	6.5	650	0	0	0	0
2127	159	1.7	169	0	0	0	0
2128	146	1.7	169	0	0	0	0
2129	141	2.4	243	0	0	0	0
2130	49	2.5	251	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2131	114	2.5	251	0	0	0	0
2132	113	0.9	85	0	0	0	0
2133	96	0.9	85	0	0	0	0
2134	108	0.3	32	0	0	0	0
2135	99	0.3	32	0	0	0	0
2136	113	0.3	32	0	0	0	0
2137	84	1.2	123	0	0	0	0
2138	74	2.7	267	0	0	0	0
2139	70	4.3	427	0	0	0	0
2140	86	4.3	427	0	0	0	0
2141	80	4.6	458	0	0	0	0
2142	85	4.6	458	0	0	0	0
2143	91	4.6	458	0	0	0	0
2144	89	4.3	427	0	0	0	0
2145	114	4.3	427	0	0	0	0
2146	99	2.9	291	0	0	0	0
2147	105	3.8	379	0	0	0	0
2148	100	3.8	379	0	0	0	0
2149	84	5.1	511	0	0	0	0
2150	95	5.1	511	0	0	0	0
2151	108	6.1	605	0	0	0	0
2152	80	8.4	841	0	0	0	0
2153	107	5.0	500	0	0	0	0
2154	100	5.3	528	0	0	0	0
2155	75	5.3	528	0	0	0	0
2156	86	5.7	565	0	0	0	0
2157	81	6.0	595	0	0	0	0
2158	63	6.1	611	0	0	0	0
2159	52	6.3	629	0	0	0	0
2160	63	6.3	629	0	0	0	0
2161	87	7.9	791	0	0	0	0
2162	77	11.0	1104	0	0	0	0
2163	83	14.2	1418	0	0	0	0
2164	65	18.7	1873	0	0	0	0
2165	28	26.1	2583	11	0	0	0
2166	51	26.1	2583	11	0	0	0
2167	248	26.1	2583	11	0	0	0
2168	245	29.4	2918	12	0	0	0
2169	267	32.8	3254	14	0	0	0
2170	257	32.8	3254	14	0	0	0
2171	216	32.8	3254	14	0	0	0
2172	187	32.8	3254	14	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2173	229	33.8	3350	14	0	0	0
2174	225	34.8	3445	15	0	0	0
2175	245	34.8	3445	15	0	0	0
2176	263	34.9	3458	16	0	0	0
2177	232	35.0	3471	16	0	0	0
2178	288	35.0	3471	16	0	0	0
2179	279	35.0	3471	16	0	0	0
2180	291	35.0	3471	16	0	0	0
2181	242	33.8	3347	16	0	0	0
2182	204	33.8	3347	16	0	0	0
2183	238	33.8	3347	16	0	0	0
2184	231	33.8	3347	16	0	0	0
2185	291	33.8	3347	16	0	0	0
2186	234	32.8	3248	16	0	0	0
2187	269	31.8	3149	15	0	0	0
2188	252	31.8	3149	15	0	0	0
2189	192	30.1	2984	15	0	0	0
2190	247	28.5	2819	15	0	0	0
2191	229	28.5	2819	15	0	0	0
2192	214	28.5	2819	15	0	0	0
2193	203	24.9	2455	15	0	0	0
2194	207	24.8	2455	14	0	0	0
2195	174	24.8	2455	14	0	0	0
2196	232	23.9	2358	14	0	0	0
2197	223	22.9	2260	14	0	0	0
2198	182	22.9	2260	14	0	0	0
2199	201	22.9	2260	14	0	0	0
2200	166	21.4	2118	13	0	0	0
2201	151	21.4	2118	13	0	0	0
2202	134	20.3	2000	13	0	0	0
2203	156	20.3	2000	13	0	0	0
2204	183	20.3	2000	13	0	0	0
2205	167	19.2	1897	13	0	0	0
2206	168	19.2	1897	13	0	0	0
2207	195	19.2	1897	13	0	0	0
2208	154	18.8	1849	13	0	0	0
2209	169	18.8	1849	13	0	0	0
2210	124	18.7	1841	14	0	0	0
2211	128	18.7	1841	14	0	0	0
2212	137	18.7	1841	14	0	0	0
2213	103	18.2	1790	13	0	0	0
2214	126	17.3	1706	13	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2215	144	17.3	1706	13	0	0	0
2216	167	17.3	1706	13	0	0	0
2217	126	16.7	1642	13	0	0	0
2218	142	16.7	1642	13	0	0	0
2219	136	16.7	1642	12	0	0	0
2220	137	16.3	1605	12	0	0	0
2221	150	24.1	2377	17	0	0	0
2222	120	22.1	2191	10	0	0	0
2223	150	8.9	865	10	0	0	0
2224	70	10.3	1009	9	0	0	0
2225	92	10.3	1009	9	0	0	0
2226	130	20.6	2035	14	0	0	0
2227	111	20.6	2035	14	0	0	0
2228	101	25.4	2511	15	0	0	0
2229	99	26.1	2574	16	0	0	0
2230	56	23.5	2317	15	0	0	0
2231	63	23.5	2317	15	0	0	0
2232	51	17.8	1759	12	0	0	0
2233	35	15.7	1546	12	0	0	0
2234	60	14.5	1429	11	0	0	0
2235	74	13.8	1353	11	0	0	0
2236	52	13.4	1316	11	0	0	0
2237	63	13.1	1287	10	0	0	0
2238	74	13.1	1287	10	0	0	0
2239	77	12.9	1272	11	0	0	0
2240	88	12.8	1261	10	0	0	0
2241	85	12.6	1241	10	0	0	0
2242	82	12.6	1241	10	0	0	0
2243	60	12.6	1234	11	0	0	0
2244	64	12.7	1243	11	0	0	0
2245	66	12.9	1264	11	0	0	0
2246	61	13.1	1287	11	0	0	0
2247	33	12.9	1265	10	0	0	0
2248	43	13.3	1309	10	0	0	0
2249	34	13.2	1295	10	0	0	0
2250	21	7.2	723	0	0	0	0
2251	41	6.7	672	0	0	0	0
2252	49	6.8	677	0	0	0	0
2253	35	6.8	683	0	0	0	0
2254	49	6.7	668	0	0	0	0
2255	34	6.6	661	0	0	0	0
2256	89	6.6	658	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2257	77	7.1	711	0	0	0	0
2258	31	16.1	1585	13	0	0	0
2259	189	16.1	1585	13	0	0	0
2260	231	16.1	1585	13	0	0	0
2261	223	16.8	1650	13	0	0	0
2262	252	17.4	1716	13	0	0	0
2263	254	17.4	1716	13	0	0	0
2264	275	17.4	1716	13	0	0	0
2265	265	17.4	1716	13	0	0	0
2266	306	17.4	1716	13	0	0	0
2267	213	16.3	1605	13	0	0	0
2268	315	16.3	1605	13	0	0	0
2269	287	16.3	1605	13	0	0	0
2270	265	16.3	1605	13	0	0	0
2271	277	12.9	1273	10	0	0	0
2272	259	12.9	1273	10	0	0	0
2273	235	12.9	1273	10	0	0	0
2274	217	12.9	1273	10	0	0	0
2275	248	10.6	1046	9	0	0	0
2276	296	10.6	1046	9	0	0	0
2277	328	10.6	1046	9	0	0	0
2278	356	10.6	1046	9	0	0	0
2279	347	10.6	1046	9	0	0	0
2280	309	10.8	1058	10	0	0	0
2281	299	10.9	1070	10	0	0	0
2282	301	10.9	1070	10	0	0	0
2283	286	10.9	1070	10	0	0	0
2284	169	10.9	1070	10	0	0	0
2285	110	17.6	1730	17	0	0	0
2286	156	17.6	1730	17	0	0	0
2287	199	25.5	2505	23	0	0	0
2288	209	25.5	2505	23	0	0	0
2289	241	25.5	2505	23	0	0	0
2290	243	25.3	2505	12	0	0	0
2291	242	25.5	2505	23	0	0	0
2292	271	26.7	2624	24	0	0	0
2293	245	26.7	2624	24	0	0	0
2294	201	26.7	2624	24	0	0	0
2295	257	26.7	2624	24	0	0	0
2296	236	24.0	2352	22	0	0	0
2297	235	24.0	2352	22	0	0	0
2298	223	24.0	2352	22	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2299	231	24.0	2352	22	0	0	0
2300	215	20.1	1968	19	0	0	0
2301	194	20.1	1968	19	0	0	0
2302	203	20.1	1968	19	0	0	0
2303	207	17.9	1754	17	0	0	0
2304	235	17.9	1754	17	0	0	0
2305	236	17.9	1754	17	0	0	0
2306	242	17.9	1754	17	0	0	0
2307	229	16.4	1608	16	0	0	0
2308	229	16.4	1608	16	0	0	0
2309	165	16.4	1608	16	0	0	0
2310	177	17.2	1688	16	0	0	0
2311	180	17.2	1688	16	0	0	0
2312	193	17.2	1688	16	0	0	0
2313	192	10.8	1050	13	0	0	0
2314	128	10.8	1050	13	0	0	0
2315	86	10.8	1050	13	0	0	0
2316	159	6.0	584	9	0	0	0
2317	46	9.3	911	11	0	0	0
2318	61	9.3	911	11	0	0	0
2319	110	21.5	2114	18	0	0	0
2320	32	40.6	4001	31	0	0	0
2321	84	55.6	5483	40	0	0	0
2322	109	66.3	6498	46	0	9	0
2323	161	66.3	6498	46	0	9	0
2324	97	66.3	6498	46	0	9	0
2325	106	73.6	7217	51	0	11	0
2326	70	76.2	7475	53	0	10	0
2327	77	72.7	7125	50	0	10	0
2328	56	65.3	6405	45	0	9	0
2329	59	65.3	6405	45	0	9	0
2330	131	57.8	5696	40	0	0	0
2331	112	54.4	5352	38	0	4	0
2332	86	51.1	5007	36	0	8	0
2333	72	46.1	4547	33	0	0	0
2334	80	46.1	4547	33	0	0	0
2335	140	36.1	3533	38	0	0	0
2336	137	36.1	3533	38	0	0	0
2337	108	37.7	3694	36	0	0	0
2338	112	37.7	3694	36	0	0	0
2339	76	39.1	3746	37	31	0	0
2340	137	39.1	3746	37	31	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2341	86	55.3	5352	39	32	0	0
2342	58	51.8	5007	39	32	0	0
2343	81	47.5	4547	50	33	0	0
2344	95	47.5	4547	50	33	0	0
2345	91	37.2	3533	42	35	0	0
2346	98	37.2	3533	42	35	0	0
2347	102	39.6	3694	50	43	9	0
2348	101	40.1	3694	60	51	11	0
2349	104	40.6	3746	60	51	11	0
2350	118	40.8	3746	63	54	11	0
2351	71	73.2	6991	65	51	11	0
2352	58	66.5	6344	68	46	9	0
2353	37	44.2	4185	70	32	0	0
2354	192	87.0	8225	98	70	16	0
2355	172	87.0	8225	99	70	16	0
2356	283	87.0	8225	100	70	16	0
2357	254	108.8	10302	120	87	20	0
2358	234	108.9	10302	121	87	20	0
2359	245	111.0	10506	125	89	20	0
2360	200	113.4	10711	140	91	20	0
2361	228	113.5	10711	142	91	20	0
2362	221	113.5	10711	145	91	20	0
2363	226	108.9	10275	135	87	20	0
2364	245	104.4	9839	138	83	19	0
2365	176	104.4	9839	139	83	19	0
2366	211	104.4	9839	140	83	19	0
2367	228	104.5	9839	142	83	19	0
2368	241	95.5	8982	138	73	17	0
2369	224	95.4	8982	137	73	17	0
2370	216	95.4	8982	137	73	17	0
2371	218	86.9	8145	128	65	14	7
2372	201	86.9	8145	128	65	14	7
2373	198	86.9	8145	129	65	14	7
2374	218	86.9	8145	130	65	14	7
2375	268	76.2	7147	125	56	13	0
2376	245	76.2	7147	124	56	13	0
2377	236	76.2	7147	124	56	13	0
2378	221	76.2	7147	125	56	13	0
2379	211	76.2	7147	126	56	13	0
2380	235	70.7	6629	120	52	12	0
2381	205	70.7	6629	119	52	12	0
2382	212	70.7	6629	118	52	12	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2383	231	67.6	6345	110	50	11	0
2384	243	67.6	6345	110	50	11	0
2385	260	67.6	6345	108	50	11	0
2386	202	66.5	6245	107	49	11	0
2387	206	57.1	5340	100	44	10	0
2388	233	47.9	4434	100	40	9	0
2389	274	41.4	3833	95	34	4	0
2390	258	35.1	3232	94	29	0	0
2391	239	35.1	3232	94	29	0	0
2392	232	35.2	3232	98	29	0	0
2393	309	34.0	3200	70	20	0	0
2394	289	33.6	3180	65	15	0	0
2395	265	26.2	2440	65	15	0	0
2396	374	18.7	1699	61	15	0	0
2397	315	18.6	1699	60	15	0	0
2398	212	8.5	768	40	0	0	0
2399	224	8.1	768	20	0	0	0
2400	206	7.8	768	5	0	0	0
2401	238	7.7	768	0	0	0	0
2402	232	5.5	548	0	0	0	0
2403	244	3.3	327	0	0	0	0
2404	250	3.3	327	0	0	0	0
2405	238	3.3	327	0	0	0	0
2406	206	1.6	157	0	0	0	0
2407	264	1.6	157	0	0	0	0
2408	193	1.6	157	0	0	0	0
2409	175	1.6	157	0	0	0	0
2410	184	1.6	157	0	0	0	0
2411	186	10.1	858	62	9	0	0
2412	1	14.5	1267	65	18	0	0
2413	89	14.5	1267	66	18	0	0
2414	83	14.4	1256	67	18	0	0
2415	93	14.5	1256	69	18	0	0
2416	55	14.5	1259	68	18	0	0
2417	51	11.5	990	60	14	0	0
2418	37	8.9	751	55	11	0	0
2419	74	7.5	632	45	9	0	0
2420	111	6.8	573	40	9	0	0
2421	127	6.8	573	38	9	0	0
2422	106	6.4	542	35	8	0	0
2423	100	6.3	542	34	8	0	0
2424	108	6.4	552	34	8	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2425	42	6.4	554	33	8	0	0
2426	56	6.5	554	35	8	0	0
2427	50	6.4	544	34	8	0	0
2428	58	6.3	542	33	8	0	0
2429	67	6.4	548	35	8	0	0
2430	77	6.4	548	34	8	0	0
2431	109	6.5	549	36	8	0	0
2432	81	6.4	550	35	8	0	0
2433	56	6.5	547	38	9	0	0
2434	54	6.4	534	39	8	0	0
2435	58	6.2	517	38	8	0	0
2436	58	6.1	507	39	7	0	0
2437	43	6.3	531	37	8	0	0
2438	56	6.3	538	35	6	0	0
2439	53	5.7	489	33	5	0	0
2440	61	5.8	490	32	8	0	0
2441	63	5.6	477	30	8	0	0
2442	80	5.5	472	28	8	0	0
2443	96	5.4	472	25	7	0	0
2444	105	5.6	487	28	7	0	0
2445	108	5.7	487	29	9	0	0
2446	95	5.7	490	24	9	0	0
2447	52	5.7	489	26	9	0	0
2448	58	6.0	520	28	9	0	0
2449	55	9.2	830	29	10	0	0
2450	62	7.4	644	30	11	0	0
2451	224	7.5	644	35	11	0	0
2452	202	7.5	644	36	11	0	0
2453	125	7.3	624	37	10	0	0
2454	168	7.3	624	38	10	0	0
2455	247	7.3	624	38	10	0	0
2456	238	7.0	591	37	10	0	0
2457	277	7.0	591	39	10	0	0
2458	273	7.0	591	40	10	0	0
2459	150	6.5	546	38	9	0	0
2460	147	6.5	546	37	9	0	0
2461	183	6.5	546	36	9	0	0
2462	194	6.4	529	35	12	0	0
2463	175	6.4	529	37	12	0	0
2464	263	6.4	529	39	12	0	0
2465	250	6.5	529	40	14	0	0
2466	263	6.4	507	42	15	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2467	273	6.4	507	45	15	0	0
2468	240	6.5	507	47	15	0	0
2469	271	6.5	507	49	15	0	0
2470	257	6.8	529	50	17	0	0
2471	239	6.8	529	48	19	0	0
2472	222	6.9	529	49	20	0	0
2473	207	6.7	507	50	22	0	0
2474	75	6.9	507	48	28	0	0
2475	164	6.9	507	49	28	0	0
2476	228	6.9	507	49	29	0	0
2477	245	8.0	626	50	25	0	0
2478	133	7.9	626	52	20	0	0
2479	138	8.4	572	110	15	0	0
2480	235	8.0	519	110	20	0	0
2481	258	8.3	520	115	25	0	0
2482	250	8.6	522	115	35	0	0
2483	292	7.7	480	120	15	0	0
2484	285	7.5	480	120	10	0	0
2485	278	7.6	480	125	9	0	0
2486	273	8.0	529	125	8	0	0
2487	280	8.5	578	120	10	0	0
2488	281	8.6	578	128	10	0	0
2489	258	8.7	578	130	10	0	0
2490	297	12.2	933	128	10	0	0
2491	322	15.8	1288	129	10	0	0
2492	315	15.1	1288	100	8	0	0
2493	269	15.4	1288	110	11	0	0
2494	273	15.4	1288	108	12	0	0
2495	368	15.5	1288	107	15	0	0
2496	487	15.5	1288	105	18	0	0
2497	270	14.4	1188	109	10	0	0
2498	297	13.3	1089	110	8	0	0
2499	409	13.1	1089	100	7	0	0
2500	260	10.5	832	98	6	0	0
2501	312	7.9	576	99	5	0	0
2502	246	7.8	576	95	4	0	0
2503	258	7.8	580	96	3	0	0
2504	225	7.9	590	99	1	0	0
2505	213	14.2	1286	64	1	0	0
2506	225	20.5	1982	30	3	0	0
2507	270	3.6	310	25	0	0	0
2508	163	4.0	374	15	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2509	187	4.7	438	15	0	0	0
2510	164	5.2	499	10	0	0	0
2511	234	5.8	560	10	0	0	0
2512	298	5.8	560	10	0	0	0
2513	312	5.8	560	10	0	0	0
2514	244	6.2	596	10	0	0	0
2515	290	6.5	631	11	0	0	0
2516	361	6.9	667	11	0	0	0
2517	265	6.9	667	11	0	0	0
2518	338	6.9	667	11	0	0	0
2519	507	6.9	667	11	0	0	0
2520	318	6.9	670	12	0	0	0
2521	99	7.0	671	14	0	0	0
2522	72	7.0	671	14	0	0	0
2523	82	7.0	671	14	0	0	0
2524	89	7.1	675	15	0	0	0
2525	59	7.1	675	15	0	0	0
2526	120	7.1	675	15	0	0	0
2527	128	7.1	675	15	0	0	0
2528	139	7.2	680	18	0	0	0
2529	52	7.2	680	18	0	0	0
2530	42	7.2	680	18	0	0	0
2531	21	7.3	691	20	0	0	0
2532	38	0.0	0	0	0	0	0
2533	41	0.0	0	0	0	0	0
2534	32	0.0	0	0	0	0	0
2535	31	0.0	0	0	0	0	0
2536	86	0.0	0	0	0	0	0
2537	77	0.0	0	0	0	0	0
2538	72	0.0	0	0	0	0	0
2539	84	0.0	0	0	0	0	0
2540	74	0.0	0	0	0	0	0
2541	74	0.0	0	0	0	0	0
2542	70	0.0	0	0	0	0	0
2543	78	0.0	0	0	0	0	0
2544	66	0.0	0	0	0	0	0
2545	75	0.0	0	0	0	0	0
2546	67	0.0	0	0	0	0	0
2547	68	0.0	0	0	0	0	0
2548	56	0.0	0	0	0	0	0
2549	49	0.0	0	0	0	0	0
2550	35	0.0	0	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2551	42	0.0	0	0	0	0	0
2552	47	0.0	0	0	0	0	0
2553	41	0.0	0	0	0	0	0
2554	37	0.0	0	0	0	0	0
2555	39	0.0	0	0	0	0	0
2556	33	0.0	0	0	0	0	0
2557	35	0.0	0	0	0	0	0
2558	52	0.0	0	0	0	0	0
2559	50	0.0	0	0	0	0	0
2560	57	0.0	0	0	0	0	0
2561	50	0.0	0	0	0	0	0
2562	49	0.0	0	0	0	0	0
2563	45	0.0	0	0	0	0	0
2564	33	0.0	0	0	0	0	0
2565	49	0.0	0	0	0	0	0
2566	71	0.0	0	0	0	0	0
2567	57	0.0	0	0	0	0	0
2568	68	0.0	0	0	0	0	0
2569	66	0.0	0	0	0	0	0
2570	83	6.4	542	35	8	0	0
2571	98	6.3	542	34	8	0	0
2572	96	6.4	552	34	8	0	0
2573	118	6.4	554	33	8	0	0
2574	107	6.5	554	35	8	0	0
2575	114	6.4	544	34	8	0	0
2576	138	6.3	542	33	8	0	0
2577	120	6.4	548	35	8	0	0
2578	108	6.4	548	34	8	0	0
2579	128	6.5	549	36	8	0	0
2580	129	6.4	550	35	8	0	0
2581	119	6.5	547	38	9	0	0
2582	121	6.4	534	39	8	0	0
2583	120	6.2	517	38	8	0	0
2584	69	6.1	507	39	7	0	0
2585	77	6.3	531	37	8	0	0
2586	109	6.3	538	35	6	0	0
2587	121	5.7	489	33	5	0	0
2588	137	5.8	490	32	8	0	0
2589	112	5.6	477	30	8	0	0
2590	119	5.5	472	28	8	0	0
2591	135	5.4	472	25	7	0	0
2592	115	5.6	487	28	7	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2593	137	5.7	487	29	9	0	0
2594	85	5.7	490	24	9	0	0
2595	118	5.7	489	26	9	0	0
2596	122	6.0	521	28	9	0	0
2597	123	9.2	830	29	10	0	0
2598	109	7.4	644	30	11	0	0
2599	103	7.5	644	35	11	0	0
2600	107	7.5	644	36	11	0	0
2601	105	7.3	624	37	10	0	0
2602	122	7.3	624	38	10	0	0
2603	98	7.3	624	38	10	0	0
2604	51	7.0	591	37	10	0	0
2605	90	7.0	591	39	10	0	0
2606	117	7.0	591	40	10	0	0
2607	133	6.5	546	38	9	0	0
2608	60	6.5	546	37	9	0	0
2609	77	6.5	546	36	9	0	0
2610	99	6.4	529	35	12	0	0
2611	102	6.4	529	37	12	0	0
2612	114	6.4	529	38	12	0	0
2613	119	6.5	529	40	14	0	0
2614	112	6.4	508	42	15	0	0
2615	107	6.4	508	45	15	0	0
2616	107	6.5	508	47	15	0	0
2617	103	6.5	508	49	15	0	0
2618	125	6.8	529	50	17	0	0
2619	117	6.8	529	48	19	0	0
2620	103	6.8	529	49	19	0	0
2621	87	6.7	507	50	21	0	0
2622	102	5.8	556	12	0	0	0
2623	115	5.8	556	12	0	0	0
2624	122	5.1	500	4	0	0	0
2625	124	5.1	500	4	0	0	0
2626	123	5.1	500	5	0	0	0
2627	102	4.4	428	5	0	0	0
2628	96	4.4	428	6	0	0	0
2629	113	3.1	300	6	0	0	0
2630	124	3.1	300	4	0	0	0
2631	1	3.3	320	4	0	0	0
2632	79	2.6	258	3	0	0	0
2633	74	1.7	162	3	0	0	0
2634	77	1.6	153	2	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2635	43	3.1	305	2	0	0	0
2636	62	3.2	305	5	0	0	0
2637	64	4.4	425	6	0	0	0
2638	62	4.4	425	6	0	0	0
2639	74	5.2	501	9	0	0	0
2640	88	5.2	501	9	0	0	0
2641	75	3.3	316	8	0	0	0
2642	76	2.9	276	8	0	0	0
2643	96	2.9	276	8	0	0	0
2644	76	3.4	328	8	0	0	0
2645	103	4.7	429	14	3	0	0
2646	94	4.7	429	14	3	0	0
2647	80	4.3	397	13	2	0	0
2648	50	4.3	399	12	2	0	0
2649	4	5.6	530	12	2	0	0
2650	73	4.2	396	12	0	0	0
2651	64	4.2	396	12	0	0	0
2652	60	5.5	520	13	0	0	0
2653	64	5.5	520	13	0	0	0
2654	41	5.5	520	13	0	0	0
2655	65	7.5	708	15	3	0	0
2656	86	7.5	708	15	3	0	0
2657	97	7.3	697	15	2	0	0
2658	96	7.3	697	15	2	0	0
2659	86	7.3	693	15	3	0	0
2660	97	7.3	693	15	3	0	0
2661	56	15.4	1425	41	10	0	0
2662	133	15.4	1425	41	10	0	0
2663	158	17.3	1606	46	12	0	0
2664	122	17.3	1606	46	12	0	0
2665	150	21.4	1973	60	16	0	0
2666	154	21.4	1973	60	16	0	0
2667	157	21.4	1973	60	16	0	0
2668	170	21.4	1973	60	16	0	0
2669	157	19.2	1761	56	15	0	0
2670	152	19.2	1761	56	15	0	0
2671	113	16.0	1466	47	13	0	0
2672	136	16.0	1466	47	13	0	0
2673	169	16.0	1466	47	13	0	0
2674	161	13.2	1197	44	12	0	0
2675	215	13.2	1197	44	12	0	0
2676	181	7.3	693	15	3	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2677	195	15.4	1425	41	10	0	0
2678	157	15.4	1425	41	10	0	0
2679	145	17.3	1606	46	12	0	0
2680	162	17.3	1606	46	12	0	0
2681	140	21.4	1973	60	16	0	0
2682	133	21.4	1973	60	16	0	0
2683	138	21.4	1973	60	16	0	0
2684	133	21.4	1973	60	16	0	0
2685	141	19.2	1761	56	15	0	0
2686	164	19.2	1761	56	15	0	0
2687	120	16.0	1466	47	13	0	0
2688	130	16.0	1466	47	13	0	0
2689	195	16.0	1466	47	13	0	0
2690	199	13.2	1197	44	12	0	0
2691	208	13.2	1197	44	12	0	0
2692	210	34.4	3150	99	29	0	0
2693	211	24.6	2268	67	19	0	0
2694	216	24.6	2268	67	19	0	0
2695	211	24.6	2268	67	19	0	0
2696	243	24.6	2268	67	19	0	0
2697	220	24.1	2227	62	18	0	0
2698	234	23.5	2186	57	16	0	0
2699	213	33.8	3153	80	22	0	0
2700	188	44.1	4120	102	29	0	0
2701	221	44.1	4120	102	29	0	0
2702	238	44.1	4120	102	29	0	0
2703	213	155.7	14552	361	100	0	0
2704	228	267.4	24984	620	172	0	0
2705	235	267.4	24984	620	172	0	0
2706	246	267.4	24984	620	172	0	0
2707	224	423.9	39397	1064	288	0	0
2708	224	580.4	53810	1509	403	0	0
2709	184	651.7	60197	1762	484	0	0
2710	199	723.1	66584	2016	566	0	0
2711	147	723.1	66584	2016	566	0	0
2712	178	723.1	66584	2016	566	0	0
2713	181	831.2	76138	2452	692	0	0
2714	178	939.2	85692	2887	819	0	0
2715	202	939.2	85692	2887	819	0	0
2716	171	1199.3	109326	3752	1034	0	0
2717	168	1199.3	109326	3752	1034	0	0
2718	138	1199.3	109326	3752	1034	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2719	136	1199.3	109326	3752	1034	0	0
2720	130	763.2	69500	2391	679	0	0
2721	110	355.5	32338	1105	334	0	0
2722	105	6.5	631	11	0	0	0
2723	107	6.9	667	11	0	0	0
2724	97	6.9	667	11	0	0	0
2725	92	7.0	667	11	5	0	0
2726	104	7.0	667	11	5	0	0
2727	82	7.1	670	12	6	0	0
2728	117	7.2	671	14	6	0	0
2729	75	7.2	671	14	6	0	0
2730	87	7.2	671	14	8	0	0
2731	89	7.3	675	15	8	0	0
2732	95	7.4	675	15	10	0	0
2733	86	8.6	765	28	12	0	0
2734	83	8.6	765	28	12	0	0
2735	104	9.5	854	30	12	0	0
2736	109	9.5	854	30	12	0	0
2737	103	10.8	973	32	13	0	0
2738	89	10.8	973	32	13	0	0
2739	59	11.6	1158	0	0	0	0
2740	70	19.5	1947	0	0	0	0
2741	86	21.2	2118	0	0	0	0
2742	89	21.2	2118	0	0	0	0
2743	101	19.3	1930	0	0	0	0
2744	90	19.3	1930	0	0	0	0
2745	92	17.4	1738	0	0	0	0
2746	77	16.6	1658	0	0	0	0
2747	115	16.6	1658	0	0	0	0
2748	100	16.8	1600	26	8	0	0
2749	95	17.0	1548	51	16	0	0
2750	83	17.0	1548	51	16	0	0
2751	101	17.0	1548	51	16	0	0
2752	105	17.0	1548	51	16	0	0
2753	80	20.1	2010	0	0	0	0
2754	99	20.1	2010	0	0	0	0
2755	111	25.7	2570	0	0	0	0
2756	113	25.7	2570	0	0	0	0
2757	106	25.7	2570	0	0	0	0
2758	97	25.6	2562	0	0	0	0
2759	110	25.7	2570	0	0	0	0
2760	77	25.7	2570	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2761	82	25.6	2562	0	0	0	0
2762	79	23.1	2314	0	0	0	0
2763	102	23.1	2314	0	0	0	0
2764	100	20.9	2089	0	0	0	0
2765	84	20.9	2089	0	0	0	0
2766	92	22.8	2284	0	0	0	0
2767	109	25.5	2546	0	0	0	0
2768	154	26.8	2684	0	0	0	0
2769	144	28.2	2822	0	0	0	0
2770	169	28.2	2822	0	0	0	0
2771	187	28.2	2822	0	0	0	0
2772	198	35.5	3545	0	0	0	0
2773	174	35.5	3545	0	0	0	0
2774	197	37.9	3788	0	0	0	0
2775	181	40.3	4032	0	0	0	0
2776	177	40.3	4032	0	0	0	0
2777	163	37.5	3749	0	0	0	0
2778	178	34.7	3466	0	0	0	0
2779	175	34.7	3466	0	0	0	0
2780	145	34.7	3466	0	0	0	0
2781	163	28.4	2636	71	20	0	0
2782	159	28.4	2636	71	20	0	0
2783	161	28.4	2636	71	20	0	0
2784	135	28.4	2636	71	20	0	0
2785	154	28.4	2636	71	20	0	0
2786	147	25.0	2501	0	0	0	0
2787	120	25.0	2501	0	0	0	0
2788	129	25.0	2501	0	0	0	0
2789	177	23.0	2295	0	0	0	0
2790	134	23.0	2295	0	0	0	0
2791	185	23.0	2295	0	0	0	0
2792	147	23.0	2295	0	0	0	0
2793	175	23.0	2295	0	0	0	0
2794	152	19.7	1973	0	0	0	0
2795	207	19.7	1973	0	0	0	0
2796	163	18.6	1855	0	0	0	0
2797	163	18.6	1855	0	0	0	0
2798	156	18.6	1855	0	0	0	0
2799	137	17.6	1760	0	0	0	0
2800	179	17.6	1760	0	0	0	0
2801	163	17.6	1760	0	0	0	0
2802	159	17.6	1760	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2803	170	17.3	1725	0	0	0	0
2804	193	17.0	1702	0	0	0	0
2805	139	16.8	1679	0	0	0	0
2806	166	16.8	1679	0	0	0	0
2807	163	16.5	1650	0	0	0	0
2808	141	16.2	1621	0	0	0	0
2809	118	16.2	1621	0	0	0	0
2810	138	16.0	1599	0	0	0	0
2811	159	16.0	1599	0	0	0	0
2812	173	15.2	1521	0	0	0	0
2813	158	15.2	1521	0	0	0	0
2814	149	15.2	1521	0	0	0	0
2815	125	15.5	1554	0	0	0	0
2816	175	15.5	1554	0	0	0	0
2817	181	15.5	1554	0	0	0	0
2818	154	17.0	1642	27	0	0	0
2819	53	8.2	824	0	0	0	0
2820	103	8.2	821	0	0	0	0
2821	80	8.6	856	0	0	0	0
2822	176	8.6	856	0	0	0	0
2823	122	7.9	786	0	0	0	0
2824	336	7.2	715	0	0	0	0
2825	280	7.2	715	0	0	0	0
2826	260	7.2	715	0	0	0	0
2827	274	14.5	1452	0	0	0	0
2828	316	14.5	1452	0	0	0	0
2829	211	14.5	1452	0	0	0	0
2830	200	14.5	1452	0	0	0	0
2831	176	28.8	2877	0	0	0	0
2832	192	28.8	2877	0	0	0	0
2833	239	28.8	2877	0	0	0	0
2834	228	32.5	3248	0	0	0	0
2835	195	32.5	3248	0	0	0	0
2836	222	32.5	3248	0	0	0	0
2837	156	32.5	3248	0	0	0	0
2838	192	290.0	29003	0	0	0	0
2839	224	290.0	29003	0	0	0	0
2840	203	290.0	29003	0	0	0	0
2841	232	290.0	29003	0	0	0	0
2842	219	437.8	43782	0	0	0	0
2843	212	437.8	43782	0	0	0	0
2844	247	437.8	43782	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2845	250	269.8	26979	0	0	0	0
2846	279	269.8	26979	0	0	0	0
2847	266	269.8	26979	0	0	0	0
2848	232	130.2	13020	0	0	0	0
2849	198	130.2	13020	0	0	0	0
2850	227	130.2	13020	0	0	0	0
2851	182	130.2	13020	0	0	0	0
2852	186	130.2	13020	0	0	0	0
2853	234	130.2	13020	0	0	0	0
2854	211	130.2	13020	0	0	0	0
2855	218	130.2	13020	0	0	0	0
2856	195	130.2	13020	0	0	0	0
2857	181	101.0	10100	0	0	0	0
2858	169	101.0	10100	0	0	0	0
2859	135	43.8	4380	0	0	0	0
2860	140	43.8	4380	0	0	0	0
2861	149	43.8	4380	0	0	0	0
2862	148	43.8	4380	0	0	0	0
2863	150	43.8	4380	0	0	0	0
2864	134	44.5	4380	34	0	0	0
2865	145	44.5	4380	34	0	0	0
2866	149	44.5	4380	34	0	0	0
2867	145	44.5	4380	34	0	0	0
2868	180	44.5	4380	34	0	0	0
2869	216	42.0	4142	30	0	0	0
2870	175	42.0	4142	30	0	0	0
2871	207	42.0	4142	30	0	0	0
2872	177	41.6	4100	28	0	0	0
2873	176	41.1	4059	27	0	0	0
2874	177	41.1	4059	27	0	0	0
2875	187	41.1	4059	27	0	0	0
2876	181	40.6	4011	25	0	0	0
2877	165	40.5	4024	12	0	0	0
2878	189	40.4	4038	0	0	0	0
2879	149	40.4	4038	0	0	0	0
2880	140	40.5	4046	0	0	0	0
2881	134	40.5	4046	0	0	0	0
2882	139	40.5	4046	0	0	0	0
2883	177	38.7	3866	0	0	0	0
2884	162	36.9	3687	0	0	0	0
2885	151	36.9	3687	0	0	0	0
2886	142	35.3	3530	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2887	165	35.3	3530	0	0	0	0
2888	146	35.3	3530	0	0	0	0
2889	141	33.3	3332	0	0	0	0
2890	133	33.3	3332	0	0	0	0
2891	151	31.3	3126	0	0	0	0
2892	135	31.3	3126	0	0	0	0
2893	133	30.7	3071	0	0	0	0
2894	161	30.7	3071	0	0	0	0
2895	177	30.7	3071	0	0	0	0
2896	125	32.4	3071	63	15	0	0
2897	104	32.4	3071	63	15	0	0
2898	127	32.5	3071	66	15	0	0
2899	139	32.6	3081	66	15	0	0
2900	217	32.6	3081	66	15	0	0
2901	120	32.6	3081	70	14	0	0
2902	113	32.7	3085	70	14	0	0
2903	132	32.6	3085	66	15	0	0
2904	116	32.6	3085	66	15	0	0
2905	129	29.1	2794	33	16	0	0
2906	152	26.2	2504	31	17	0	0
2907	170	30.3	2900	31	22	0	0
2908	152	30.3	2900	30	22	0	0
2909	164	30.3	2900	30	22	0	0
2910	138	32.8	3151	30	22	0	0
2911	147	32.8	3151	29	22	0	0
2912	135	32.4	3120	28	21	0	0
2913	123	32.4	3120	29	21	0	0
2914	187	12.4	1155	29	9	0	0
2915	121	12.4	1155	29	9	0	0
2916	185	12.4	1155	29	9	0	0
2917	198	13.0	1200	33	10	0	0
2918	184	13.0	1200	33	10	0	0
2919	219	13.0	1200	33	10	0	0
2920	189	11.1	1024	30	8	0	0
2921	240	11.1	1024	30	8	0	0
2922	202	11.1	1024	30	8	0	0
2923	210	11.1	1024	30	8	0	0
2924	201	21.7	2023	52	15	0	0
2925	197	21.7	2023	52	15	0	0
2926	196	21.7	2023	52	15	0	0
2927	183	23.3	2180	54	15	0	0
2928	191	25.0	2338	57	15	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2929	138	25.0	2338	57	15	0	0
2930	158	21.4	2012	45	11	0	0
2931	156	21.4	2012	45	11	0	0
2932	167	19.6	1842	44	10	0	0
2933	150	17.9	1671	44	10	0	0
2934	143	17.9	1671	44	10	0	0
2935	127	17.9	1671	44	10	0	0
2936	158	17.9	1671	44	10	0	0
2937	202	17.9	1671	44	10	0	0
2938	176	17.9	1671	44	10	0	0
2939	175	14.0	1300	40	7	0	0
2940	197	14.0	1300	40	7	0	0
2941	179	13.5	1290	20	5	0	0
2942	165	13.5	1290	20	5	0	0
2943	170	13.5	1290	20	5	0	0
2944	155	13.5	1290	20	5	0	0
2945	178	13.5	1290	20	5	0	0
2946	170	13.5	1290	20	5	0	0
2947	134	20.6	1990	22	7	0	0
2948	159	20.6	1990	22	7	0	0
2949	150	20.6	1990	25	7	0	0
2950	147	20.3	1954	25	8	0	0
2951	145	17.2	1646	25	7	0	0
2952	130	17.2	1646	25	7	0	0
2953	138	17.2	1646	26	7	0	0
2954	152	17.7	1697	26	7	0	0
2955	123	19.2	1842	26	8	0	0
2956	111	20.7	1987	28	8	0	0
2957	134	20.7	1987	28	8	0	0
2958	110	21.9	2118	20	9	0	0
2959	112	21.9	2118	22	9	0	0
2960	141	19.0	1833	22	7	0	0
2961	152	19.0	1833	25	7	0	0
2962	119	19.0	1833	25	7	0	0
2963	129	18.8	1805	25	7	0	0
2964	154	18.8	1805	25	7	0	0
2965	141	18.8	1805	26	7	0	0
2966	135	17.7	1695	26	7	0	0
2967	178	18.2	1742	30	7	0	0
2968	186	18.7	1788	30	7	0	0
2969	158	18.7	1788	30	7	0	0
2970	147	19.0	1798	38	8	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2971	165	19.0	1798	38	8	0	0
2972	126	19.0	1798	38	8	0	0
2973	135	19.0	1798	38	8	0	0
2974	129	19.0	1798	38	8	0	0
2975	150	19.0	1798	38	8	0	0
2976	149	19.1	1800	40	10	0	0
2977	123	19.1	1800	40	10	0	0
2978	133	19.1	1800	40	10	0	0
2979	120	10.0	900	38	9	0	0
2980	127	0.9	0	35	7	0	0
2981	157	0.9	0	35	7	0	0
2982	127	10.8	1060	0	5	0	0
2983	151	10.8	1060	0	5	0	0
2984	75	4.1	406	0	2	0	0
2985	118	4.1	406	0	2	0	0
2986	117	1.5	152	0	0	0	0
2987	61	1.1	99	3	0	0	0
2988	60	0.8	82	2	0	0	0
2989	98	0.6	64	0	0	0	0
2990	81	0.4	37	0	0	0	0
2991	103	0.4	37	0	0	0	0
2992	113	0.3	28	0	0	0	0
2993	137	19.4	1922	10	0	0	0
2994	115	19.4	1922	10	0	0	0
2995	116	19.4	1922	10	0	0	0
2996	105	9.5	940	5	0	0	0
2997	136	9.5	940	5	0	0	0
2998	191	9.5	940	5	0	0	0
2999	130	1.7	169	0	0	0	0
3000	128	1.7	169	0	0	0	0
3001	160	1.7	169	0	0	0	0
3002	131	12.9	1267	7	2	0	0
3003	99	12.9	1267	7	3	0	0
3004	92	20.4	1901	52	11	0	0
3005	90	20.4	1901	53	11	0	0
3006	89	11.8	1096	32	6	0	0
3007	103	3.2	291	10	2	0	0
3008	165	2.7	267	0	0	0	0
3009	163	2.7	267	0	0	0	0
3010	198	2.7	267	0	0	0	0
3011	190	2.8	274	1	0	0	0
3012	183	2.8	280	2	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3013	217	2.9	280	3	0	0	0
3014	224	2.9	280	3	0	0	0
3015	183	2.9	280	4	0	0	0
3016	149	2.7	267	2	0	0	0
3017	158	2.7	267	0	0	0	0
3018	168	3.5	351	0	0	0	0
3019	162	3.5	351	0	0	0	0
3020	125	3.5	351	0	0	0	0
3021	143	7.0	688	4	0	0	0
3022	157	7.0	690	4	0	0	0
3023	201	7.0	691	5	0	0	0
3024	167	7.0	691	4	0	0	0
3025	120	7.6	755	4	0	0	0
3026	141	7.6	755	4	0	0	0
3027	172	7.6	755	4	0	0	0
3028	144	8.7	868	3	0	0	0
3029	195	8.8	868	5	0	0	0
3030	141	8.8	868	5	0	0	0
3031	179	8.5	841	5	0	0	0
3032	137	8.5	841	5	0	0	0
3033	158	8.5	841	5	0	0	0
3034	127	8.5	841	6	0	0	0
3035	161	8.2	799	9	1	0	0
3036	146	8.5	799	17	5	0	0
3037	99	7.4	694	17	4	0	0
3038	129	3.9	347	16	4	0	0
3039	141	3.9	350	16	3	0	0
3040	112	4.0	357	16	3	0	0
3041	110	4.1	368	14	3	0	0
3042	99	4.0	370	14	0	0	0
3043	140	4.1	380	14	0	0	0
3044	141	4.2	390	13	0	0	0
3045	119	7.2	682	15	3	0	0
3046	94	7.3	682	18	3	0	0
3047	100	7.3	682	20	3	0	0
3048	124	7.0	644	22	3	0	0
3049	112	7.0	644	25	3	0	0
3050	114	6.5	618	12	3	0	0
3051	114	6.3	618	7	0	0	0
3052	122	5.9	582	5	0	0	0
3053	134	5.9	582	4	0	0	0
3054	123	5.9	581	4	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3055	86	5.9	581	5	0	0	0
3056	115	5.9	581	6	0	0	0
3057	131	6.4	623	8	0	0	0
3058	87	7.2	685	12	3	0	0
3059	139	7.2	685	12	3	0	0
3060	128	7.3	710	8	2	0	0
3061	135	7.3	710	9	2	0	0
3062	166	7.4	710	10	2	0	0
3063	151	7.1	680	11	3	0	0
3064	137	7.1	680	11	3	0	0
3065	134	7.3	696	10	3	0	0
3066	128	7.4	711	12	3	0	0
3067	105	7.5	711	15	3	0	0
3068	119	9.8	922	20	5	0	0
3069	125	9.8	922	20	5	0	0
3070	135	10.8	1015	22	6	0	0
3071	121	10.8	1015	22	6	0	0
3072	118	7.7	715	19	5	0	0
3073	145	7.7	715	19	5	0	0
3074	126	4.4	399	15	4	0	0
3075	171	4.4	399	15	4	0	0
3076	101	4.2	398	13	0	0	0
3077	105	4.2	390	13	0	0	0
3078	95	4.2	400	12	0	0	0
3079	94	4.4	420	12	0	0	0
3080	118	5.4	517	8	1	0	0
3081	96	5.4	517	9	1	0	0
3082	113	5.3	509	8	3	0	0
3083	128	5.3	509	7	3	0	0
3084	133	5.3	499	10	3	0	0
3085	89	5.5	526	8	3	0	0
3086	108	5.8	554	7	3	0	0
3087	140	6.5	624	7	3	0	0
3088	195	7.3	693	14	3	0	0
3089	110	7.3	693	14	3	0	0
3090	154	8.5	812	14	4	0	0
3091	125	8.5	812	15	4	0	0
3092	139	8.6	812	16	5	0	0
3093	126	8.7	822	16	5	0	0
3094	136	8.7	822	16	4	0	0
3095	178	8.7	822	16	4	0	0
3096	115	9.1	897	5	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3097	87	9.0	884	7	1	0	0
3098	95	8.8	870	7	0	0	0
3099	117	9.1	870	16	4	0	0
3100	147	8.9	850	16	3	0	0
3101	123	5.2	500	10	0	0	0
3102	122	3.2	300	10	0	0	0
3103	19	2.6	262	0	0	0	0
3104	159	2.6	262	0	0	0	0
3105	159	2.8	273	1	0	0	0
3106	186	2.9	284	2	0	0	0
3107	190	2.9	284	2	0	0	0
3108	147	2.9	284	2	0	0	0
3109	134	2.9	286	0	0	0	0
3110	126	2.9	286	0	0	0	0
3111	133	3.2	323	0	0	0	0
3112	118	3.2	323	0	0	0	0
3113	136	3.8	372	2	0	0	0
3114	132	4.3	422	3	0	0	0
3115	157	4.3	422	3	0	0	0
3116	146	6.8	663	6	0	0	0
3117	148	6.8	663	6	0	0	0
3118	129	7.4	722	7	0	0	0
3119	82	7.4	722	7	0	0	0
3120	141	7.9	775	7	0	0	0
3121	126	7.9	775	7	0	0	0
3122	130	7.9	775	7	0	0	0
3123	66	12.1	1194	7	0	0	0
3124	126	10.5	1041	5	0	0	0
CHACRA Fm.							
3125	115	10.5	1041	5	0	0	0
3126	133	9.1	886	8	4	0	0
3127	132	7.8	730	17	4	0	0
3128	134	3.4	304	15	3	0	0
3129	137	3.4	304	15	3	0	0
3130	123	3.4	304	15	3	0	0
3131	126	3.7	340	14	0	0	0
3132	128	3.7	345	14	0	0	0
3133	151	3.8	348	14	0	0	0
3134	140	3.8	350	13	0	0	0
3135	127	4.3	380	19	4	0	0
3136	92	4.4	390	19	4	0	0
3137	127	4.6	410	19	4	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3138	102	11.3	1004	43	12	0	0
3139	80	11.1	982	45	13	0	0
3140	64	11.1	982	45	13	0	0
3141	122	8.7	850	8	0	0	0
3142	111	8.7	850	8	0	0	0
3143	122	7.5	737	6	0	0	0
3144	135	7.5	737	6	0	0	0
3145	110	6.6	646	5	0	0	0
3146	106	6.1	604	4	0	0	0
3147	122	5.7	563	4	0	0	0
3148	101	5.3	527	3	0	0	0
3149	143	5.3	527	3	0	0	0
3150	91	5.8	541	14	4	0	0
3151	104	6.3	586	14	4	0	0
3152	109	5.9	586	3	0	0	0
3153	67	6.3	622	4	0	0	0
3154	103	6.3	622	4	0	0	0
3155	118	6.3	622	4	0	0	0
3156	126	6.5	642	4	0	0	0
3157	249	6.5	642	4	0	0	0
3158	189	6.6	651	3	0	0	0
3159	110	6.6	651	3	0	0	0
3160	122	5.9	552	16	3	0	0
3161	126	5.9	552	16	3	0	0
3162	139	5.9	552	16	3	0	0
3163	110	3.5	312	16	3	0	0
3164	138	3.1	270	16	3	0	0
3165	126	3.5	300	19	3	0	0
3166	119	4.0	350	20	3	0	0
3167	127	5.5	500	20	3	0	0
3168	57	8.2	778	15	4	0	0
3169	109	8.1	778	10	4	0	0
3170	100	7.2	706	4	2	0	0
3171	90	7.2	706	4	1	0	0
3172	95	6.4	632	3	0	0	0
3173	92	6.3	617	4	0	0	0
3174	95	6.3	617	4	0	0	0
3175	127	6.0	591	4	0	0	0
3176	91	6.0	591	4	0	0	0
3177	92	5.9	583	4	0	0	0
3178	91	5.9	583	4	0	0	0
3179	119	6.1	604	3	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3180	113	6.1	604	3	0	0	0
3181	71	6.4	598	15	4	0	0
3182	112	6.3	621	3	0	0	0
3183	121	6.3	621	3	0	0	0
3184	120	7.0	659	15	3	0	0
3185	127	6.2	570	17	4	0	0
3186	115	5.0	450	21	3	0	0
3187	128	4.6	400	23	3	0	0
3188	115	4.5	390	22	4	0	0
3189	143	4.8	420	22	4	0	0
3190	106	4.9	450	16	3	0	0
3191	106	5.3	490	16	3	0	0
3192	89	5.1	500	5	0	0	0
3193	137	5.2	510	5	0	0	0
3194	122	2.3	215	6	0	0	0
3195	107	2.3	215	6	0	0	0
3196	87	7.0	652	18	3	0	0
3197	90	6.9	652	12	3	0	0
3198	157	7.5	706	12	6	0	0
3199	104	8.1	761	12	8	0	0
3200	144	8.2	761	15	8	0	0
3201	145	9.1	855	16	7	0	0
3202	111	9.1	855	18	7	0	0
3203	143	9.2	855	20	8	0	0
3204	183	8.0	740	17	9	0	0
3205	187	6.8	624	15	7	0	0
3206	168	6.7	624	14	7	0	0
3207	148	6.6	607	15	6	0	0
3208	145	6.5	607	14	6	0	0
3209	160	6.7	625	15	6	0	0
3210	147	6.9	643	15	5	0	0
3211	127	6.8	643	13	5	0	0
3212	148	6.4	599	14	4	0	0
3213	154	6.4	599	15	4	0	0
3214	132	6.4	599	14	4	0	0
3215	153	5.9	555	14	3	0	0
3216	142	5.9	555	14	3	0	0
3217	128	5.0	463	14	3	0	0
3218	131	5.0	463	14	3	0	0
3219	114	5.2	481	15	4	0	0
3220	134	5.2	481	15	4	0	0
3221	92	5.2	481	15	4	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3222	151	5.3	490	16	3	0	0
3223	123	5.4	500	16	3	0	0
3224	80	5.6	520	17	2	0	0
3225	151	5.7	524	17	3	0	0
3226	142	5.8	535	17	3	0	0
3227	174	6.4	600	17	3	0	0
3228	122	6.9	634	21	3	0	0
3229	84	8.3	781	19	4	0	0
3230	119	8.4	790	19	3	0	0
3231	121	11.0	1027	25	6	0	0
3232	93	11.0	1027	25	6	0	0
3233	116	11.0	1027	25	6	0	0
3234	105	9.5	885	23	5	0	0
3235	134	9.5	885	23	5	0	0
3236	125	9.8	916	24	6	0	0
3237	112	9.9	916	26	6	0	0
3238	129	10.9	1018	27	6	0	0
3239	123	10.9	1018	27	6	0	0
3240	114	10.7	994	29	7	0	0
3241	96	10.8	994	30	7	0	0
3242	135	9.4	876	25	6	0	0
3243	131	9.4	876	25	6	0	0
3244	84	8.5	783	22	6	0	0
3245	109	7.8	726	20	5	0	0
3246	112	7.8	726	20	5	0	0
3247	122	7.8	726	20	5	0	0
3248	103	7.7	721	20	4	0	0
3249	119	7.7	721	20	4	0	0
3250	109	7.9	730	22	5	0	0
3251	107	7.3	671	21	5	0	0
3252	101	7.3	675	21	3	0	0
3253	122	7.1	665	20	3	0	0
3254	111	7.2	668	20	3	0	0
3255	95	7.2	670	20	2	0	0
3256	101	7.3	680	20	3	0	0
3257	107	7.2	670	19	3	0	0
3258	103	7.2	665	19	4	0	0
3259	97	7.2	665	19	4	0	0
3260	94	6.7	624	17	4	0	0
3261	114	6.8	636	18	4	0	0
3262	117	6.8	636	18	4	0	0
3263	118	6.8	636	18	4	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3264	94	6.6	608	18	4	0	0
3265	118	6.7	617	18	4	0	0
3266	102	6.6	617	18	3	0	0
3267	106	6.8	635	18	4	0	0
3268	102	6.8	635	18	4	0	0
3269	101	6.6	614	17	4	0	0
3270	110	6.6	614	18	4	0	0
3271	69	6.7	618	18	4	0	0
3272	93	6.7	623	19	4	0	0
3273	113	6.7	623	19	4	0	0
3274	94	6.7	623	19	4	0	0
3275	131	6.4	589	18	4	0	0
3276	116	6.4	590	18	4	0	0
3277	121	6.4	590	18	4	0	0
3278	110	6.4	593	19	4	0	0
3279	112	6.4	593	19	4	0	0
3280	95	6.4	593	19	4	0	0
3281	109	6.3	580	19	3	0	0
3282	125	6.4	595	19	3	0	0
3283	119	6.7	620	20	3	0	0
3284	112	7.2	664	20	4	0	0
3285	123	7.2	666	22	4	0	0
3286	114	7.3	666	25	4	0	0
3287	137	7.3	666	27	4	0	0
3288	117	5.1	464	20	3	0	0
3289	74	4.9	450	18	2	0	0
3290	82	4.8	435	17	2	0	0
3291	75	4.5	410	16	3	0	0
3292	50	4.3	384	15	4	0	0
3293	49	4.3	384	14	5	0	0
3294	65	4.5	410	12	6	0	0
3295	79	4.8	443	10	5	0	0
3296	50	4.3	400	11	4	0	0
3297	44	4.4	404	12	4	0	0
3298	44	5.0	458	13	5	0	0
3299	63	5.3	493	12	4	0	0
3300	62	5.7	537	11	5	0	0
3301	63	5.8	537	11	6	0	0
3302	74	6.9	632	15	10	0	0
3303	39	7.4	663	18	12	0	0
3304	23	9.2	840	20	14	0	0
3305	45	9.3	871	15	10	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3306	21	7.9	734	14	9	0	0
3307	64	7.1	668	12	7	0	0
3308	62	7.2	668	12	8	0	0
3309	35	6.9	626	16	10	0	0
3310	41	8.0	722	20	13	0	0
3311	50	6.8	616	16	11	0	0
3312	63	5.6	506	13	9	0	0
3313	186	5.6	506	13	8	0	0
3314	148	4.6	420	11	7	0	0
3315	150	6.6	614	18	4	0	0
3316	156	6.7	618	18	4	0	0
3317	125	6.7	623	19	4	0	0
3318	152	6.7	623	19	4	0	0
3319	170	6.7	623	19	4	0	0
3320	126	6.4	589	18	4	0	0
3321	142	6.4	590	18	4	0	0
3322	157	4.3	388	10	6	0	0
3323	121	2.3	190	12	5	0	0
3324	112	2.3	190	14	5	0	0
3325	133	2.0	165	15	0	0	0
3326	169	4.4	394	14	6	0	0
3327	155	7.0	624	16	13	0	0
3328	131	7.0	624	16	13	0	0
3329	163	10.8	990	26	14	0	0
3330	144	10.9	990	26	15	0	0
3331	107	9.8	896	23	14	0	0
3332	87	8.6	773	22	13	0	0
3333	75	10.4	922	32	18	0	0
3334	121	10.4	922	32	17	0	0
3335	144	10.7	974	27	14	0	0
3336	148	8.1	746	19	10	0	0
3337	90	8.1	746	19	10	0	0
3338	98	8.4	773	21	9	0	0
3339	116	8.5	773	21	10	0	0
3340	119	8.5	773	21	12	0	0
3341	73	6.3	561	15	13	0	0
3342	120	6.3	561	15	13	0	0
3343	157	6.3	561	15	13	0	0
3344	110	6.6	586	16	13	0	0
3345	163	7.3	656	18	12	0	0
3346	171	8.0	725	19	12	0	0
3347	106	7.9	725	18	10	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3348	104	7.9	725	17	11	0	0
3349	91	8.5	768	20	13	0	0
3350	144	8.5	768	22	14	0	0
3351	117	8.5	768	20	13	0	0
3352	178	8.8	804	18	14	0	0
3353	145	8.8	804	18	14	0	0
3354	146	8.8	804	18	14	0	0
3355	183	9.4	858	18	14	0	0
3356	173	9.4	858	18	14	0	0
3357	187	7.8	700	19	15	0	0
3358	200	6.3	572	11	8	4	0
3359	204	12.7	1144	22	17	8	0
3360	154	12.7	1144	22	17	8	0
3361	130	25.6	2324	38	31	16	0
3362	130	29.8	2700	45	37	19	0
3363	112	29.8	2700	45	37	19	0
3364	105	20.8	1873	33	28	15	0
3365	130	20.8	1873	33	28	15	0
3366	100	15.2	1354	27	21	12	0
3367	124	15.2	1354	27	21	12	0
3368	150	15.2	1354	27	21	12	0
3369	148	12.3	1093	21	18	10	0
3370	142	10.7	950	19	16	9	0
3371	152	9.1	807	17	13	8	0
3372	150	7.7	679	14	11	7	1
3373	125	6.3	561	15	13	0	0
3374	149	6.3	561	15	13	0	0
3375	149	6.6	586	16	13	0	0
3376	82	7.3	656	18	12	0	0
3377	116	8.0	725	19	12	0	0
3378	70	7.9	725	18	10	0	0
3379	106	7.9	725	17	11	0	0
3380	98	8.5	768	20	13	0	0
3381	79	8.5	768	22	14	0	0
3382	93	8.5	768	20	13	0	0
3383	105	8.8	804	18	14	0	0
3384	99	8.8	804	18	14	0	0
3385	110	8.8	804	18	14	0	0
3386	92	9.4	858	18	14	0	0
3387	85	10.2	900	20	25	1	0
3388	105	11.4	1000	28	17	8	0
3389	110	4.4	385	15	9	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3390	131	4.3	385	10	8	0	0
3391	170	5.7	503	14	7	5	0
3392	166	8.8	757	16	9	7	7
3393	152	9.1	757	22	12	9	7
3394	146	9.1	757	23	13	8	7
3395	152	6.7	578	15	10	8	0
3396	146	6.7	578	15	10	7	0
3397	113	5.9	541	11	7	2	0
3398	166	5.7	541	8	3	0	0
3399	100	5.6	541	7	1	0	0
3400	138	6.2	600	10	0	0	0
3401	148	8.1	786	11	0	0	0
3402	137	8.1	786	12	0	0	0
3403	139	8.1	786	13	0	0	0
3404	156	7.7	737	12	3	0	0
3405	162	7.4	688	14	7	0	0
3406	207	8.2	712	17	14	8	0
3407	94	8.2	712	18	14	8	0
3408	175	8.2	712	19	14	8	0
3409	174	10.4	924	20	12	10	0
3410	206	10.4	924	19	14	10	0
3411	149	6.3	561	15	13	0	0
3412	130	6.3	561	15	13	0	0
3413	84	6.6	586	16	13	0	0
3414	201	7.3	656	18	12	0	0
3415	184	8.0	725	19	12	0	0
3416	166	7.9	725	18	10	0	0
3417	157	7.9	725	17	11	0	0
3418	148	8.5	768	20	13	0	0
3419	147	8.5	768	22	14	0	0
3420	153	8.5	768	20	13	0	0
3421	171	8.8	804	18	14	0	0
3422	189	8.8	804	18	14	0	0
3423	208	10.4	902	25	20	6	0
3424	144	11.6	1001	29	18	12	0
3425	152	10.5	912	23	15	12	0
3426	125	10.7	912	25	19	12	0
3427	103	23.6	2158	63	25	0	0
3428	112	23.5	2158	63	23	0	0
3429	127	19.7	1800	55	20	0	0
3430	94	23.6	2158	63	25	0	0
3431	115	23.5	2158	63	23	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3432	72	19.8	1800	55	20	2	0
3433	111	23.7	2158	63	23	3	0
3434	99	19.7	1800	55	20	0	0
3435	114	11.6	1000	54	18	0	0
3436	126	11.3	984	50	15	0	0
3437	108	11.2	984	45	14	0	0
3438	109	9.8	863	40	12	0	0
3439	100	9.7	863	38	10	0	0
3440	115	7.8	682	37	9	0	0
3441	113	7.7	682	30	8	0	0
3442	126	6.7	615	13	10	0	0
3443	116	6.7	615	13	8	0	0
3444	82	6.5	602	12	9	0	0
3445	108	6.6	610	14	7	0	0
3446	102	8.1	724	19	16	0	0
3447	91	8.6	766	22	18	0	0
3448	99	9.2	809	25	21	0	0
3449	81	8.8	777	23	19	0	0
3450	92	8.8	777	23	19	0	0
3451	87	8.5	748	22	18	0	0
3452	73	8.1	720	21	17	0	0
3453	81	7.6	688	16	13	0	0
3454	90	7.6	688	16	13	0	0
3455	88	8.4	765	17	14	0	0
3456	82	9.1	823	19	16	0	0
3457	98	9.1	823	19	16	0	0
3458	125	9.1	823	19	16	0	0
3459	122	9.2	827	20	19	0	0
3460	119	9.3	831	21	19	0	0
3461	141	9.3	831	21	19	0	0
3462	136	9.3	831	21	19	0	0
3463	97	9.8	886	23	17	0	0
3464	91	9.6	870	22	15	0	0
3465	95	8.8	800	21	14	0	0
3466	72	7.7	700	17	13	0	0
3467	73	6.9	620	15	13	0	0
3468	89	6.7	608	14	12	0	0
3469	116	6.7	608	14	12	0	0
3470	76	6.1	547	13	11	0	0
3471	103	6.1	547	13	11	0	0
3472	102	5.2	473	12	9	0	0
3473	118	5.2	473	12	9	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3474	126	5.8	516	14	11	0	0
3475	127	5.8	516	14	11	0	0
3476	114	7.6	685	17	14	0	0
3477	106	8.7	789	19	15	0	0
3478	86	8.7	789	19	14	0	0
3479	83	7.1	644	16	12	0	0
3480	72	9.2	841	21	13	0	0
3481	72	9.4	850	22	14	0	0
3482	75	8.8	800	20	12	0	0
3483	65	3.4	308	10	5	0	0
3484	29	2.8	250	8	4	0	0
3485	41	2.9	260	7	4	0	0
3486	49	2.6	235	6	3	0	0
3487	44	2.6	235	7	3	0	0
3488	51	3.4	315	6	5	0	0
3489	54	3.7	342	7	5	0	0
3490	53	3.7	342	7	4	0	0
3491	56	4.8	455	6	5	0	0
3492	61	5.3	505	7	5	0	0
3493	60	5.5	523	7	5	0	0
3494	57	5.7	537	7	5	0	0
3495	48	5.3	500	7	5	0	0
3496	63	5.1	480	7	6	0	0
3497	61	5.0	466	8	7	0	0
3498	48	4.5	416	7	7	0	0
3499	52	4.0	371	7	6	0	0
3500	39	4.0	375	7	5	0	0
3501	52	4.1	381	7	5	0	0
3502	61	4.1	381	7	6	0	0
3503	39	4.1	381	7	5	0	0
3504	156	4.1	375	8	5	0	0
3505	202	2.0	188	4	2	0	0
3506	201	4.1	381	7	6	0	0
3507	240	4.1	381	7	5	0	0
3508	179	4.1	375	8	5	0	0
3509	177	2.0	188	4	2	0	0
3510	155	8.8	800	21	14	0	0
3511	174	7.7	700	17	13	0	0
3512	203	6.9	620	15	13	0	0
3513	157	6.7	608	14	12	0	0
3514	139	6.7	608	14	12	0	0
3515	139	6.1	547	13	11	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3516	181	6.1	547	13	11	0	0
3517	173	7.7	699	15	13	0	0
3518	161	7.7	699	15	13	0	0
3519	172	7.7	699	15	13	0	0
3520	171	6.1	544	17	12	0	0
3521	151	4.6	390	19	11	0	0
3522	184	7.6	701	13	10	0	0
3523	136	7.6	701	13	10	0	0
3524	137	7.7	714	13	10	0	0
3525	123	7.9	726	13	11	0	0
3526	154	7.9	734	13	11	0	0
3527	110	7.9	734	13	11	0	0
3528	106	7.7	713	12	10	0	0
3529	123	7.7	713	12	10	0	0
3530	122	8.1	755	13	11	0	0
3531	104	8.1	755	13	11	0	0
3532	100	8.2	760	12	11	0	0
3533	88	8.2	760	12	11	0	0
3534	105	8.8	800	21	14	0	0
3535	96	8.0	700	17	13	6	1
3536	142	7.2	620	15	13	6	1
3537	139	7.0	608	14	12	6	1
3538	127	6.7	608	14	12	0	0
3539	112	6.1	547	13	11	0	0
3540	141	6.1	547	13	11	0	0
3541	128	7.7	699	15	13	0	0
3542	123	7.7	699	15	13	0	0
3543	121	7.7	699	15	13	0	0
3544	129	6.1	544	17	12	0	0
3545	126	4.6	390	19	11	0	0
3546	122	7.6	701	13	10	0	0
3547	97	7.6	701	13	10	0	0
3548	63	7.7	714	13	10	0	0
3549	105	7.9	726	13	11	0	0
3550	83	7.9	734	13	11	0	0
3551	118	7.9	734	13	11	0	0
3552	97	7.7	713	12	10	0	0
3553	86	7.7	713	12	10	0	0
3554	95	8.1	755	13	11	0	0
3555	100	43.6	337	303	300	293	268
3556	101	43.6	337	303	300	293	268
3557	122	203.2	996	997	1032	1363	1757

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3558	114	362.8	1655	1691	1763	2432	3246
3559	93	362.7	1655	1691	1763	2428	3246
3560	109	362.7	1655	1691	1763	2428	3246
3561	108	362.7	1655	1691	1763	2428	3246
3562	117	362.7	1655	1691	1763	2428	3246
3563	116	362.7	1655	1691	1763	2428	3246
3564	95	362.7	1655	1691	1763	2428	3246
3565	82	362.7	1655	1691	1763	2428	3246
3566	106	362.7	1655	1691	1763	2428	3246
3567	113	336.0	1838	1873	1914	2246	2659
3568	96	309.4	2020	2055	2065	2064	2071
3569	97	309.2	2020	2045	2065	2064	2071
3570	103	10.8	960	18	20	5	1
3571	98	10.8	960	18	20	5	1
3572	107	7.8	691	13	13	4	1
3573	93	7.8	691	13	13	4	1
3574	128	3.1	274	5	5	2	0
3575	89	11.3	976	20	18	6	7
3576	117	19.6	1677	34	32	11	14
3577	31	7.6	680	12	11	4	1
3578	143	7.6	680	11	11	4	1
3579	79	6.0	529	9	9	4	1
3580	139	6.0	529	9	9	4	1
3581	131	4.5	405	8	7	1	1
3582	95	4.5	405	8	7	1	1
3583	149	5.5	495	10	9	1	1
3584	125	5.5	495	10	9	1	1
3585	121	7.3	638	14	12	5	1
3586	115	7.3	638	14	12	5	1
3587	153	7.3	638	14	13	5	1
3588	168	7.5	663	15	13	1	2
3589	124	7.5	663	15	13	1	2
3590	191	7.4	663	14	13	1	2
3591	141	8.7	774	16	14	5	1
3592	205	8.7	774	16	14	5	1
3593	160	10.4	944	17	12	6	1
3594	146	10.4	944	17	12	6	1
3595	177	10.4	944	17	12	6	1
3596	109	10.3	945	16	9	5	1
3597	156	10.3	945	16	9	5	1
3598	146	9.8	923	15	6	1	1
3599	114	9.8	923	15	6	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3600	133	9.9	927	15	8	2	1
3601	154	9.9	927	15	8	2	1
3602	134	9.9	927	15	8	2	1
3603	87	7.4	655	14	12	3	1
3604	131	7.4	655	14	12	3	1
3605	156	5.8	516	10	9	3	1
3606	156	5.8	516	10	9	3	1
3607	118	5.8	516	10	8	3	1
3608	88	5.8	514	10	8	4	1
3609	94	5.8	514	10	9	4	1
3610	99	6.7	589	11	11	4	1
3611	98	6.5	581	11	11	3	1
3612	120	6.6	583	12	11	4	1
3613	66	6.6	583	12	11	4	1
3614	96	7.1	626	13	12	4	1
3615	151	7.2	643	13	12	4	0
3616	138	7.2	643	13	12	4	0
3617	188	7.2	643	13	12	4	0
3618	118	7.4	658	13	13	4	1
3619	169	7.4	658	13	13	4	1
3620	193	7.4	658	13	13	4	1
3621	153	7.7	679	14	13	4	1
3622	135	7.7	679	14	13	4	1
3623	159	7.7	679	14	13	4	1
3624	129	7.7	679	14	13	4	1
3625	134	8.6	768	15	13	4	1
3626	130	9.1	820	16	13	3	1
3627	136	9.1	820	16	13	4	1
3628	142	9.8	899	17	8	4	1
3629	127	9.8	899	17	8	4	1
3630	141	9.8	899	17	8	5	1
3631	141	11.1	1033	19	8	3	1
3632	137	11.1	1033	19	8	3	1
3633	120	10.8	998	19	8	4	1
3634	105	10.8	998	19	8	4	1
3635	115	10.3	946	17	8	4	1
3636	141	10.3	946	17	8	4	1
3637	116	9.8	866	20	16	4	1
3638	162	9.8	866	20	16	4	1
3639	114	9.7	866	20	16	3	1
3640	107	9.2	832	19	15	0	1
3641	75	8.5	754	17	14	3	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3642	70	8.2	735	17	14	3	0
3643	84	8.2	735	17	14	3	0
3644	37	8.5	750	18	15	4	1
3645	45	8.3	734	18	14	4	1
3646	161	8.3	734	18	14	4	1
3647	122	7.5	659	16	13	4	0
3648	116	7.5	659	16	13	4	0
3649	164	6.7	594	14	11	3	1
3650	149	6.7	594	14	11	3	1
3651	132	6.7	594	14	11	3	1
3652	157	7.1	624	15	13	4	1
3653	175	7.1	624	15	13	4	1
3654	117	7.9	692	17	13	4	1
3655	130	7.8	692	17	13	3	1
3656	155	7.8	692	17	13	3	1
3657	101	7.0	621	15	12	3	1
3658	115	6.9	620	14	10	3	0
3659	157	6.9	620	14	10	4	0
3660	137	6.9	620	14	10	4	0
3661	104	7.3	652	14	10	4	0
3662	138	7.2	652	14	9	4	0
3663	152	9.3	822	20	16	4	0
3664	140	9.3	822	20	16	4	0
3665	129	11.5	1043	21	15	4	1
3666	140	11.5	1043	21	15	4	1
3667	74	8.4	743	19	14	4	1
3668	118	10.4	919	23	18	5	1
3669	85	10.4	919	23	18	5	1
3670	89	12.8	1124	29	22	6	1
3671	89	12.7	1124	29	22	5	1
3672	88	4.2	352	8	8	5	1
3673	132	6.1	536	12	9	5	1
3674	86	6.1	536	12	9	5	1
3675	161	6.4	558	13	9	5	1
3676	172	6.4	558	13	9	6	1
3677	168	6.4	558	13	9	6	1
3678	185	6.2	541	12	8	6	1
3679	180	6.2	541	12	8	6	1
3680	170	6.3	552	12	8	5	1
3681	168	6.4	562	13	8	5	1
3682	215	6.3	562	13	8	4	1
3683	186	6.4	562	13	9	4	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3684	126	7.9	718	16	9	4	0
3685	176	7.9	718	16	9	4	0
3686	120	10.0	922	19	8	4	0
3687	165	10.0	922	19	8	4	0
3688	127	10.1	922	19	8	4	1
3689	144	10.0	914	19	7	5	1
3690	138	10.3	941	20	7	5	1
3691	146	10.6	968	21	7	5	1
3692	153	10.6	968	21	7	5	1
3693	121	10.6	968	21	7	5	1
3694	152	11.0	1005	24	9	5	0
3695	166	11.0	1005	24	9	5	0
3696	82	11.4	1006	24	18	6	1
3697	154	11.4	1006	24	18	6	1
3698	126	12.3	1105	25	19	5	0
3699	108	12.3	1105	25	19	5	0
3700	131	12.5	1116	26	19	4	1
3701	79	12.5	1116	26	19	4	1
3702	89	12.5	1101	26	21	6	1
3703	114	12.5	1101	26	21	6	1
3704	90	12.3	1087	27	20	6	1
3705	108	12.3	1087	27	20	6	1
3706	102	12.3	1082	27	20	6	1
3707	103	12.7	1127	28	20	6	1
3708	124	12.7	1127	28	20	6	1
3709	103	13.7	1217	29	22	6	1
3710	104	13.7	1217	29	22	6	1
3711	134	14.2	1277	28	22	5	1
3712	127	14.3	1277	28	22	6	1
3713	103	14.9	1332	29	23	6	1
3714	112	14.9	1332	29	23	6	1
3715	104	14.9	1332	29	23	6	1
3716	110	16.5	1473	33	26	7	1
3717	132	17.4	1559	34	27	7	1
3718	111	17.4	1559	34	27	7	1
3719	126	17.4	1559	34	27	7	1
3720	141	16.9	1519	32	25	7	0
3721	145	16.9	1519	32	25	7	0
3722	127	17.4	1583	30	24	6	0
3723	134	17.4	1583	30	24	6	0
3724	134	17.4	1583	30	24	6	0
3725	96	18.5	1672	32	26	8	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3726	85	16.7	1496	32	26	8	0
3727	127	16.7	1496	32	26	8	0
3728	142	15.9	1416	31	24	8	1
3729	130	15.9	1416	31	24	8	1
3730	119	14.8	1321	29	23	8	0
3731	115	14.8	1321	29	23	8	0
3732	115	14.5	1294	29	23	7	1
3733	114	14.5	1294	29	23	7	1
3734	71	14.5	1292	30	23	6	1
3735	100	14.5	1292	30	23	6	1
3736	83	14.4	1285	30	23	6	1
3737	145	14.4	1277	31	23	7	1
3738	108	14.5	1277	31	23	8	1
3739	94	14.2	1252	29	23	8	1
3740	95	14.2	1252	29	23	8	2
3741	87	13.9	1227	28	23	8	2
3742	93	13.8	1219	30	23	7	1
3743	114	13.8	1219	30	23	7	1
3744	108	13.8	1225	30	24	6	0
3745	98	13.8	1225	30	24	6	0
3746	89	14.2	1254	32	24	7	0
3747	102	14.2	1254	32	24	7	0
3748	91	14.9	1327	33	20	8	1
3749	62	15.1	1357	29	22	7	1
3750	83	15.1	1357	29	22	7	1
3751	113	15.2	1368	30	22	6	1
3752	108	15.2	1368	30	20	6	1
3753	112	13.6	1216	26	20	6	1
3754	132	12.9	1146	25	20	6	1
3755	93	12.8	1146	25	18	6	1
3756	96	13.0	1150	30	21	6	1
3757	101	13.0	1150	30	21	6	1
3758	99	13.4	1193	27	22	6	0
3759	83	13.2	1176	26	22	6	1
3760	83	13.2	1176	26	22	6	1
3761	81	13.6	1212	27	21	7	1
3762	97	14.2	1274	28	22	7	0
3763	102	14.2	1274	28	22	7	0
3764	87	13.8	1226	27	23	7	1
3765	93	16.2	1358	40	40	12	2
3766	100	14.5	1294	29	23	7	1
3767	125	14.5	1292	30	23	6	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3768	177	14.5	1292	30	23	6	1
3769	104	14.4	1285	30	23	6	1
3770	179	14.4	1277	31	23	7	1
3771	148	14.4	1277	31	23	7	1
3772	154	14.2	1252	29	23	8	1
3773	123	14.2	1252	29	23	8	1
3774	123	13.8	1227	28	23	8	0
3775	124	13.8	1219	30	23	7	1
3776	78	13.8	1219	30	23	7	1
3777	127	14.1	1243	33	22	7	1
3778	111	14.3	1242	33	28	9	0
3779	106	14.3	1242	33	28	9	0
3780	114	14.3	1242	33	28	9	0
3781	120	12.2	1075	27	21	6	1
3782	139	12.2	1075	27	21	6	1
3783	60	12.2	1070	28	21	6	1
3784	130	11.5	1023	25	17	5	1
3785	77	11.5	1023	25	17	6	1
3786	115	11.8	1046	23	18	6	1
3787	87	12.5	1115	24	18	6	1
3788	119	12.5	1115	24	18	6	1
3789	114	12.0	1081	23	19	5	0
3790	134	12.0	1081	23	19	5	0
3791	141	12.0	1081	22	18	6	0
3792	149	11.8	1045	25	19	5	2
3793	147	11.8	1045	25	19	5	2
3794	143	11.4	1006	25	19	6	1
3795	140	11.4	1006	25	19	6	1
3796	139	11.0	979	24	19	5	0
3797	68	11.0	979	24	19	5	0
3798	99	10.8	952	24	18	6	1
3799	115	10.8	952	24	18	6	1
3800	101	10.6	934	24	18	5	1
3801	114	10.6	934	24	18	5	1
3802	119	11.1	977	24	18	6	1
3803	101	11.1	977	24	18	6	1
3804	88	11.8	1044	26	20	6	0
3805	88	12.5	1108	27	22	6	0
3806	109	12.6	1108	27	22	6	1
3807	93	12.6	1108	27	22	6	1
3808	123	12.9	1144	28	22	6	0
3809	113	13.4	1186	29	22	5	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3810	113	13.4	1186	29	22	5	1
3811	104	13.7	1233	30	20	5	0
3812	109	13.7	1233	30	20	5	0
3813	96	15.5	1402	31	18	7	1
3814	179	15.5	1402	31	18	7	1
3815	142	15.5	1402	31	18	7	1
3816	114	16.1	1462	30	17	7	1
3817	107	16.1	1462	30	17	7	1
3818	79	17.7	1609	34	18	8	1
3819	105	20.4	1864	39	17	10	1
3820	126	20.4	1864	39	17	10	1
3821	109	21.0	1918	41	14	11	2
3822	99	21.0	1918	41	14	11	2
3823	126	19.7	1811	40	14	10	0
3824	105	19.5	1811	30	20	5	0
3825	114	19.3	1785	31	18	7	1
3826	128	19.3	1785	31	18	7	1
3827	137	19.1	1756	31	18	7	1
3828	117	19.0	1756	30	17	7	1
3829	131	19.0	1756	30	17	7	1
3830	96	18.8	1722	34	18	8	1
3831	98	20.4	1870	39	17	10	1
3832	88	21.8	1988	39	23	10	1
3833	80	21.9	1988	41	23	11	2
3834	77	20.8	1839	40	35	13	1
3835	79	20.8	1839	40	35	13	1
3836	99	19.6	1720	42	34	11	1
3837	105	18.9	1668	42	32	10	1
3838	87	18.9	1668	42	32	10	1
3839	69	20.1	1766	41	37	11	1
3840	63	21.9	1928	41	38	14	1
3841	69	23.0	2045	40	35	16	1
3842	96	23.0	2044	41	35	14	2
3843	81	23.0	2044	41	35	14	2
3844	92	22.7	2024	42	34	13	1
3845	88	22.7	2024	42	34	13	1
3846	60	21.5	1910	39	34	12	2
3847	75	20.1	1779	43	33	11	1
3848	74	17.4	1509	42	33	10	1
3849	73	18.0	1574	42	35	10	0
3850	89	18.0	1574	42	35	10	0
3851	103	19.0	1649	43	37	11	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3852	94	19.0	1649	43	37	11	2
3853	93	18.7	1622	41	37	11	2
3854	138	18.7	1622	41	37	11	2
3855	132	17.9	1562	40	34	10	2
3856	59	16.3	1408	42	31	9	1
3857	65	16.3	1408	42	31	9	1
3858	92	15.3	1317	43	29	9	1
3859	86	15.2	1304	43	30	8	1
3860	81	6.8	585	16	14	4	1
3861	79	5.0	455	8	5	2	2
3862	80	4.7	399	11	9	3	2
3863	81	4.2	365	10	9	3	0
3864	73	4.3	365	10	9	3	1
3865	76	6.5	583	13	10	2	1
3866	68	5.9	524	11	9	2	1
3867	74	5.4	480	11	9	2	1
3868	118	5.6	495	12	9	2	1
3869	100	5.5	495	12	8	2	0
3870	97	5.5	495	12	8	2	0
3871	98	5.8	525	12	5	2	1
3872	77	9.7	841	22	19	4	2
3873	5	11.7	1015	27	22	5	2
3874	100	11.9	1040	27	22	5	1
3875	110	11.8	1040	25	20	5	1
3876	91	11.8	1040	25	20	5	1
3877	76	11.3	1000	24	20	4	2
3878	68	10.9	959	23	19	4	2
3879	46	10.0	878	23	19	4	1
3880	48	10.7	933	24	20	5	1
3881	47	10.7	933	24	20	5	1
3882	52	11.1	986	24	19	4	1
3883	42	11.0	986	23	18	3	1
3884	60	11.6	1051	24	13	4	1
3885	55	11.6	1051	22	14	4	1
3886	62	11.6	1050	22	14	4	1
3887	90	11.1	999	21	15	4	1
3888	92	10.5	946	20	15	4	1
3889	73	10.6	946	20	17	4	1
3890	77	9.9	873	20	17	4	1
3891	77	9.2	816	20	15	4	1
3892	90	9.9	875	21	17	4	1
3893	96	9.8	875	21	15	3	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3894	84	9.9	880	19	17	3	1
3895	76	9.9	880	19	17	3	1
3896	75	9.9	878	20	16	4	1
3897	78	9.9	878	20	16	4	1
3898	69	1.4	110	3	2	2	1
3899	105	1.5	124	3	2	1	2
3900	204	1.5	124	3	2	1	2
3901	177	3.2	298	5	1	1	1
3902	156	3.5	323	5	1	1	2
3903	149	4.9	459	9	2	1	1
3904	113	5.3	465	12	8	3	1
3905	179	5.9	531	14	9	0	1
3906	181	6.4	572	14	10	2	1
3907	135	6.6	585	15	10	3	1
3908	109	7.4	657	17	12	3	1
3909	127	9.9	873	20	17	6	1
3910	125	9.3	816	20	15	5	1
3911	124	10.0	875	21	17	6	1
3912	121	9.9	875	21	15	5	1
3913	120	10.0	880	19	17	6	1
3914	50	1.0	76	5	3	1	1
3915	69	1.0	76	5	3	1	1
3916	71	1.1	85	7	3	0	1
3917	72	1.4	115	5	3	1	0
3918	72	4.6	416	6	5	2	1
3919	62	4.9	441	7	7	2	1
3920	80	4.9	441	7	7	2	1
3921	68	4.2	368	9	7	1	1
3922	65	3.9	334	8	7	3	1
3923	56	3.4	301	7	6	1	1
3924	70	3.3	284	7	6	1	1
3925	74	3.3	284	7	6	1	1
3926	67	3.0	269	5	4	1	1
3927	39	3.1	271	6	4	2	1
3928	56	3.1	283	5	4	0	0
3929	80	3.4	291	7	6	2	1
3930	85	3.4	289	9	8	2	1
3931	85	3.2	268	8	7	2	1
3932	78	3.2	268	8	7	2	1
3933	76	2.8	242	7	6	1	1
3934	85	2.8	242	7	6	1	1
3935	89	2.6	220	6	5	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3936	98	2.6	220	6	5	1	1
3937	103	2.4	210	6	5	0	1
3938	79	2.5	210	6	5	1	1
3939	82	2.4	207	6	4	2	1
3940	93	2.4	207	6	4	2	1
3941	85	2.3	200	6	4	1	1
3942	100	2.3	200	6	4	1	1
3943	93	2.5	209	6	5	1	1
3944	91	2.8	243	6	5	2	1
3945	88	4.0	359	7	5	1	1
3946	90	4.0	359	7	5	1	1
3947	121	3.5	324	5	3	1	1
3948	87	3.7	341	5	4	1	1
3949	55	4.0	359	7	5	1	1
3950	55	3.5	324	5	3	1	1
3951	53	3.8	341	7	4	1	1
3952	65	2.6	226	7	6	0	1
3953	100	2.8	236	6	5	2	1
3954	119	2.8	236	6	5	2	1
3955	125	2.6	225	4	5	2	1
3956	118	2.6	225	4	3	2	1
3957	109	2.2	188	5	3	1	1
3958	125	2.1	188	5	2	1	1
3959	145	2.1	188	5	2	1	1
3960	123	2.0	170	5	3	1	1
3961	131	2.0	170	5	3	1	1
3962	117	2.3	201	4	2	2	1
3963	112	2.3	201	4	2	2	1
3964	108	3.4	302	4	3	3	1
3965	105	3.4	302	4	3	3	1
3966	118	3.9	352	4	3	3	1
3967	109	3.9	352	4	3	3	1
3968	154	3.6	336	5	3	1	1
3969	140	3.7	336	5	4	1	1
3970	113	3.7	324	9	6	2	1
3971	129	3.7	324	9	6	2	1
3972	142	3.8	324	9	7	2	1
3973	135	4.0	343	9	7	2	1
3974	131	4.0	348	9	8	2	1
3975	168	4.0	352	9	7	1	1
3976	148	4.0	352	9	7	1	1
3977	152	4.0	352	9	8	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3978	181	4.2	357	10	8	1	2
3979	147	4.2	357	10	8	1	2
3980	124	3.9	345	9	5	1	1
3981	132	3.9	345	9	5	1	1
3982	122	4.1	361	9	6	3	1
3983	102	4.1	361	9	6	3	1
3984	109	4.6	391	11	9	3	1
3985	101	4.7	407	10	10	3	1
3986	114	4.7	407	10	10	3	1
3987	115	5.4	457	13	11	4	1
3988	108	5.4	457	13	12	4	1
3989	97	6.2	515	15	15	4	2
3990	94	6.2	515	15	15	4	2
3991	104	5.9	492	14	13	5	2
3992	138	5.9	492	14	13	5	2
3993	134	5.5	465	15	12	4	1
3994	132	5.5	465	15	12	4	1
3995	111	5.3	471	11	8	3	1
3996	57	5.2	471	8	6	3	1
3997	109	5.2	472	8	6	3	1
3998	119	5.2	472	8	6	3	1
3999	99	5.5	468	14	11	4	1
4000	95	5.7	480	14	11	4	2
4001	94	5.6	480	12	10	3	2
4002	83	5.6	480	12	10	3	2
4003	105	5.6	481	13	10	4	1
4004	105	5.6	481	13	10	4	1
4005	127	5.6	481	13	10	4	1
4006	130	5.4	472	12	10	3	1
4007	108	5.7	496	12	10	3	1
4008	85	5.7	496	12	10	3	1
4009	147	5.7	496	12	10	3	1
4010	121	5.4	478	12	9	1	1
4011	99	5.5	485	12	9	2	1
4012	90	5.6	492	13	9	3	1
4013	71	5.7	495	13	9	3	1
4014	132	5.7	498	13	9	3	1
4015	78	5.8	508	13	10	3	1
4016	102	5.8	508	13	10	3	1
4017	99	5.8	508	13	10	3	1
4018	151	6.2	541	14	10	3	1
4019	105	6.2	545	15	10	2	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4020	109	6.1	545	15	10	0	1
4021	116	6.7	590	16	11	3	1
4022	111	6.7	592	16	11	3	1
4023	112	6.8	595	16	11	3	1
4024	90	6.4	595	10	6	1	1
4025	90	6.9	628	10	8	3	1
4026	103	6.9	628	10	8	3	1
4027	93	6.7	619	10	7	1	1
4028	145	6.7	619	10	7	1	1
4029	104	6.8	626	11	8	1	1
4030	108	6.8	626	11	8	1	1
4031	123	7.1	650	11	8	1	1
4032	99	7.3	650	18	11	1	2
4033	77	6.9	602	18	11	1	2
4034	69	6.9	608	18	12	1	2
4035	104	7.0	614	18	12	1	1
4036	68	7.0	614	18	12	1	1
4037	101	8.7	771	21	13	3	1
4038	98	8.7	771	21	13	3	1
4039	100	9.2	818	23	14	3	0
4040	100	9.3	818	23	14	4	1
4041	89	6.3	557	16	10	2	1
4042	125	6.1	540	14	10	2	1
4043	106	6.7	591	16	10	2	1
4044	151	7.3	642	19	11	3	1
4045	87	7.4	654	16	11	3	1
4046	84	7.4	654	16	11	3	1
4047	1	4.9	420	13	10	1	1
4048	51	4.9	420	13	10	1	1
4049	109	5.5	438	14	15	6	3
4050	74	5.1	407	13	14	6	3
4051	92	4.8	376	12	12	6	3
4052	85	3.8	306	10	8	5	1
4053	101	3.0	241	9	7	4	1
4054	100	3.0	241	9	7	4	1
4055	112	2.7	217	8	6	3	1
4056	83	2.7	217	8	6	3	1
4057	118	3.1	256	9	6	3	1
4058	122	3.1	256	9	6	3	1
4059	147	3.1	256	10	6	3	1
4060	142	4.4	393	10	5	1	1
4061	143	4.3	393	8	5	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4062	109	4.7	421	7	5	4	1
4063	72	4.4	395	6	4	3	1
4064	103	4.4	395	6	4	3	1
4065	94	4.0	355	9	6	1	1
4066	107	3.9	340	9	5	2	1
4067	74	3.9	340	9	5	2	1
4068	98	3.9	347	9	5	1	1
4069	123	3.9	347	9	5	1	1
4070	106	4.1	358	10	5	2	1
4071	142	4.1	358	10	5	2	1
4072	95	4.1	370	9	4	1	1
4073	107	4.3	385	8	5	2	1
4074	99	4.3	385	8	5	2	1
4075	121	4.5	402	10	5	2	1
4076	119	4.5	402	10	5	2	1
4077	108	4.6	416	9	5	2	1
4078	108	4.6	416	9	5	2	1
4079	103	4.6	416	9	5	2	1
4080	116	4.8	427	11	5	2	1
4081	94	5.0	453	12	5	1	1
4082	103	5.0	453	12	5	1	1
4083	99	5.2	472	11	5	2	1
4084	88	5.7	515	12	6	2	1
4085	92	5.7	515	12	6	2	1
4086	95	6.0	544	12	4	3	1
4087	97	6.0	544	12	4	3	1
4088	95	5.9	553	9	3	1	1
4089	100	5.9	553	9	3	1	1
4090	96	6.1	579	9	4	0	1
4091	99	6.3	587	8	4	2	1
4092	101	6.3	587	8	4	2	1
4093	109	6.6	615	10	5	1	1
4094	75	6.6	615	10	5	1	1
4095	95	6.8	615	15	7	1	1
4096	78	7.0	640	15	7	1	1
4097	88	7.4	676	15	7	2	1
4098	87	7.4	676	15	7	2	1
4099	80	7.6	686	18	7	3	1
4100	86	7.6	686	18	7	3	1
4101	100	7.8	711	18	8	2	1
4102	104	7.5	686	17	7	1	1
4103	93	7.5	686	17	7	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4104	109	7.0	645	16	6	0	1
4105	76	7.0	645	16	6	0	1
4106	102	6.6	604	14	6	0	1
4107	102	6.6	604	14	6	0	1
4108	97	6.2	565	13	5	1	1
4109	111	6.1	556	13	6	2	1
4110	109	6.1	546	13	6	3	1
4111	105	5.8	526	13	5	2	1
4112	97	5.8	526	13	5	2	1
4113	73	5.8	526	13	5	2	1
4114	87	5.9	529	14	5	2	1
4115	83	5.9	529	14	5	2	1
4116	76	5.8	524	14	5	2	1
4117	84	5.8	537	13	4	0	1
4118	69	5.8	537	14	4	0	1
4119	91	5.8	537	13	4	1	1
4120	96	5.8	532	13	5	0	1
4121	85	5.8	532	13	5	0	1
4122	96	5.8	525	14	5	2	1
4123	98	5.8	519	13	6	2	1
4124	108	5.8	525	13	6	2	1
4125	95	5.8	525	12	6	1	1
4126	92	5.8	525	14	6	1	1
4127	91	5.9	535	14	5	1	1
4128	68	5.9	535	14	5	1	1
4129	70	5.8	529	13	5	2	1
4130	87	6.1	553	14	5	2	1
4131	80	6.0	553	14	5	0	1
4132	81	6.2	563	14	5	1	1
4133	90	6.3	576	15	6	1	1
4134	86	6.3	576	15	6	1	1
4135	78	6.3	570	14	6	1	1
4136	93	6.3	570	14	6	2	1
4137	83	6.1	555	14	6	2	1
4138	79	6.3	572	14	6	2	1
4139	83	6.3	586	9	5	1	1
4140	79	6.3	586	8	4	2	1
4141	77	6.2	586	8	3	2	1
4142	83	6.2	575	10	3	2	1
4143	83	11.0	1001	28	11	2	1
4144	86	6.2	574	10	5	1	1
4145	89	6.2	574	10	5	1	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4146	94	6.5	579	16	9	2	1
4147	94	6.8	606	17	9	3	1
4148	100	7.0	624	19	11	0	1
4149	97	7.3	645	20	10	3	1
4150	115	7.3	645	20	10	3	1
4151	121	7.9	693	21	11	3	1
4152	111	7.9	693	21	11	3	1
4153	105	7.9	693	20	11	3	2
4154	129	7.9	693	20	11	3	2
4155	129	7.0	624	18	9	3	1
4156	120	7.0	624	18	9	3	1
4157	139	7.0	624	18	9	3	1
4158	127	6.7	601	16	8	3	1
4159	116	6.7	601	16	8	3	1
4160	137	7.0	623	18	8	3	1
4161	144	7.0	623	18	8	3	1
4162	128	9.3	843	24	10	1	1
4163	104	9.3	843	24	10	1	1
4164	145	11.4	1026	30	12	4	1
4165	100	11.1	1015	28	12	0	1
4166	72	11.1	1015	28	12	0	1
4167	88	10.4	952	21	9	3	2
4168	101	9.4	882	13	6	0	2
4169	99	9.4	882	13	6	0	2
4170	92	9.1	869	12	4	1	1
4171	127	9.1	869	12	4	1	1
4172	143	9.4	864	20	9	1	1
4173	110	9.4	864	20	9	1	1
4174	108	9.4	864	20	9	1	1
4175	113	11.0	1006	26	11	1	1
4176	60	11.0	1006	26	11	1	1
4177	45	8.1	759	11	5	2	1
4178	48	6.7	635	6	4	1	1
4179	38	5.1	476	7	3	1	1
4180	37	4.9	442	11	5	1	1
4181	44	5.0	452	11	6	0	1
4182	46	5.4	485	11	5	3	2
4183	48	5.8	525	13	6	0	2
4184	56	6.3	577	13	6	2	1
4185	78	6.3	577	13	6	2	1
4186	81	6.8	623	14	6	1	1
4187	72	7.0	641	15	6	2	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4188	67	7.0	641	15	6	2	1
4189	68	11.1	999	27	13	2	1
4190	79	12.0	1079	31	15	3	1
4191	144	12.0	1079	31	15	3	1
4192	103	12.0	1076	32	15	2	1
4193	125	12.0	1076	32	15	2	1
4194	137	11.3	1010	31	15	3	1
4195	127	11.3	1010	31	15	3	1
4196	120	11.3	1010	31	15	3	1
4197	131	10.4	917	30	15	2	1
4198	156	10.4	917	30	15	2	1
4199	120	9.1	804	26	13	2	1
4200	150	9.1	804	26	13	2	1
4201	117	8.6	758	25	12	2	1
4202	168	8.0	712	23	11	2	1
4203	128	8.0	712	23	11	2	1
4204	158	8.0	712	23	11	2	1
4205	156	7.7	683	21	10	2	1
4206	148	8.0	711	21	11	2	1
4207	159	8.0	711	21	11	2	1
4208	125	8.4	755	21	11	2	1
4209	116	8.4	755	21	11	1	1
4210	124	8.9	800	23	11	1	1
4211	138	8.9	800	23	11	1	1
4212	76	9.4	847	22	11	2	1
4213	98	9.7	883	22	11	2	1
4214	97	9.6	883	19	8	2	1
4215	94	9.6	896	16	7	1	1
4216	88	9.6	909	14	6	0	1
4217	96	10.0	936	14	7	2	1
4218	114	10.0	936	13	7	2	1
4219	125	10.4	973	14	7	2	1
4220	122	10.3	973	14	7	1	1
4221	145	10.7	1004	15	8	2	1
4222	69	11.4	1035	25	14	2	1
4223	67	11.3	1035	25	14	0	1
4224	114	11.3	1035	25	14	0	1
4225	134	11.7	1057	26	15	2	1
4226	108	11.7	1057	26	15	2	1
4227	110	11.8	1057	28	15	3	1
4228	114	11.4	1019	28	15	3	1
4229	126	11.4	1019	28	15	4	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4230	180	11.0	988	24	15	4	0
4231	151	11.0	988	24	15	4	0
4232	112	10.8	977	26	14	1	1
4233	140	10.8	977	26	14	1	1
4234	140	10.8	977	26	14	1	1
4235	136	10.7	976	23	14	1	1
4236	100	10.8	976	23	14	3	1
4237	107	10.7	969	22	14	3	1
4238	112	10.7	969	22	14	3	1
4239	95	13.0	1198	24	12	3	1
4240	69	10.6	970	22	12	3	0
4241	42	10.6	970	22	12	2	1
4242	53	10.7	975	21	13	3	1
4243	44	10.7	975	21	13	3	1
4244	40	5.8	526	13	5	2	1
4245	48	5.8	526	13	5	2	1
4246	36	5.9	529	14	5	2	1
4247	45	5.9	529	14	5	2	1
4248	48	5.8	524	14	5	2	1
4249	81	5.8	537	13	4	0	1
4250	40	5.8	537	14	4	0	1
4251	45	5.8	537	13	4	1	1
4252	77	5.8	532	13	5	0	1
4253	67	5.8	532	13	5	0	1
4254	66	5.8	525	14	5	2	1
4255	73	5.8	519	13	6	2	1
4256	72	5.8	525	13	6	2	1
4257	78	5.8	525	12	6	1	1
4258	64	5.8	525	14	6	1	1
4259	77	5.9	535	14	5	1	1
4260	87	5.9	535	14	5	1	1
4261	103	5.8	529	13	5	2	1
4262	85	6.1	553	14	5	2	1
4263	94	6.0	553	14	5	0	1
4264	68	6.2	563	14	5	1	1
4265	70	6.3	576	15	6	1	1
4266	76	6.3	576	15	6	1	1
4267	64	6.3	570	14	6	1	1
4268	66	6.3	570	14	6	2	1
4269	79	7.4	678	14	7	3	0
4270	75	7.6	692	17	7	3	0
4271	138	7.6	692	17	7	3	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4272	125	7.6	692	17	6	3	0
4273	128	8.4	759	21	6	4	1
4274	118	8.6	759	21	13	3	1
4275	121	8.7	817	13	5	2	1
4276	135	8.7	817	13	5	2	1
4277	125	9.7	910	14	5	2	1
4278	138	9.7	910	17	5	2	1
4279	129	11.2	1056	17	5	2	1
4280	125	11.0	1056	13	4	0	1
4281	137	5.7	480	14	11	4	2
4282	116	5.6	480	12	10	3	2
4283	121	5.6	480	12	10	3	2
4284	134	5.6	481	13	10	4	1
4285	152	5.6	481	13	10	4	1
4286	138	5.6	481	13	10	4	1
4287	147	5.4	472	12	10	3	1
4288	192	5.7	496	12	10	3	1
4289	152	5.7	496	12	10	3	1
4290	134	5.7	496	12	10	3	1
4291	132	5.4	478	12	9	1	1
4292	125	5.5	485	12	9	2	1
4293	140	5.6	492	13	9	3	1
4294	121	5.7	495	13	9	3	1
4295	130	5.7	498	13	9	3	1
4296	122	5.8	508	13	10	3	1
4297	116	5.8	508	13	10	3	1
4298	125	5.8	508	13	10	3	1
4299	120	6.2	541	14	10	3	1
4300	142	6.2	545	15	10	2	1
4301	117	6.1	545	15	10	0	1
4302	121	11.1	1043	14	12	0	0
4303	120	10.9	1028	14	12	0	0
4304	109	10.9	1028	14	12	0	0
4305	129	11.2	1054	14	12	0	0
4306	109	11.2	1054	15	13	0	0
4307	135	14.7	1397	15	13	0	0
4308	80	15.1	1397	25	22	0	0
4309	95	15.1	1397	25	22	0	0
4310	102	22.8	2133	30	21	4	1
4311	97	22.8	2133	30	21	4	1
4312	96	24.5	2287	40	21	3	1
4313	99	21.8	1943	66	28	3	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4314	84	21.8	1943	66	28	3	1
4315	103	19.2	1692	45	40	3	1
4316	125	19.1	1692	45	40	1	1
4317	112	18.9	1692	45	30	2	1
4318	109	16.5	1487	38	22	3	1
4319	88	16.4	1497	32	22	3	1
4320	71	15.4	1397	32	22	3	1
4321	82	16.5	1487	38	22	3	1
4322	92	16.4	1497	32	21	3	1
4323	75	13.9	1310	18	8	3	1
4324	68	13.9	1310	18	8	3	1
4325	97	15.2	1397	32	15	2	1
4326	108	13.8	1310	18	8	0	1
4327	82	13.7	1310	18	8	0	0
4328	106	13.7	1310	18	8	0	0
4329	98	11.3	1051	21	11	0	0
4330	96	6.4	569	21	11	0	0
4331	81	6.8	605	22	11	0	0
4332	124	6.4	551	25	14	0	0
4333	62	6.3	540	21	16	0	0
4334	97	6.3	540	21	16	0	0
4335	56	7.9	667	26	16	6	0
4336	96	8.4	667	36	24	6	0
4337	87	8.8	667	46	32	6	0
4338	81	21.0	1728	80	56	10	0
4339	86	28.2	2304	113	79	13	0
4340	93	28.2	2304	113	79	13	0
4341	94	19.9	1633	77	51	12	0
4342	78	15.1	1239	64	37	9	0
4343	115	15.1	1239	64	37	9	0
4344	125	15.1	1239	64	37	9	0
4345	111	15.7	1322	59	31	8	0
4346	94	14.6	1234	49	29	10	0
4347	98	14.6	1234	49	29	10	0
4348	108	14.6	1295	44	24	0	0
4349	98	14.6	1295	44	24	0	0
4350	116	12.6	1124	44	15	0	0
4351	121	12.6	1124	44	15	0	0
4352	107	12.6	1124	44	12	4	0
4353	135	11.9	1066	37	12	4	0
4354	122	12.0	1066	37	15	4	0
4355	137	12.2	1047	53	15	5	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4356	113	12.3	1047	53	20	5	0
4357	103	14.4	1230	45	24	12	0
4358	117	14.4	1230	45	24	12	0
4359	129	14.6	1249	44	31	8	0
4360	110	14.6	1249	44	31	8	0
4361	90	15.2	1290	48	28	13	0
4362	116	15.2	1290	48	28	13	0
4363	119	15.5	1306	48	32	14	0
4364	110	15.5	1306	48	32	14	0
4365	117	16.1	1347	44	39	14	0
4366	119	16.1	1347	44	39	14	0
4367	93	17.2	1477	53	30	11	0
4368	112	17.2	1477	53	30	11	0
4369	88	18.5	1577	63	36	9	0
4370	113	18.5	1577	63	36	9	0
4371	127	19.7	1722	57	35	7	0
4372	117	19.7	1722	57	35	7	1
4373	15	19.7	1722	57	35	7	1
4374	44	22.4	1948	64	39	12	0
4375	95	21.4	1863	56	34	15	0
4376	22	18.2	1578	52	32	10	0
4377	10	18.2	1578	52	32	10	0
4378	25	12.1	999	42	30	9	1
4379	7	11.6	999	32	17	9	1
4380	31	8.5	695	33	17	8	1
4381	1	8.4	695	33	17	8	0
4382	11	8.0	664	26	19	7	0
4383	5	8.6	694	33	20	9	0
4384	27	8.6	694	33	20	9	1
4385	119	8.7	712	31	20	8	1
4386	22	8.7	730	29	19	7	0
4387	71	8.7	730	29	19	7	0
4388	141	8.9	752	26	17	8	0
4389	107	8.9	752	26	17	8	0
4390	74	9.6	817	31	19	7	0
4391	121	13.1	1105	44	32	6	0
4392	115	13.1	1105	44	32	6	0
4393	75	13.1	1105	44	32	6	0
4394	167	13.5	1106	53	35	7	0
4395	111	13.5	1106	53	35	7	0
4396	88	12.8	1086	43	28	7	0
4397	171	12.9	1086	43	28	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4398	140	12.3	1043	37	26	8	0
4399	92	12.3	1043	37	26	8	0
4400	104	13.5	1131	49	29	9	0
4401	107	13.5	1131	49	29	9	0
4402	125	15.1	1293	47	26	10	0
4403	106	15.1	1293	47	26	10	0
4404	122	14.4	1220	50	27	10	0
4405	104	14.4	1220	50	27	10	0
4406	145	14.9	1245	51	33	12	0
4407	103	14.9	1245	51	33	12	0
4408	88	15.0	1238	50	31	17	0
4409	94	15.0	1238	50	31	17	0
4410	89	15.4	1284	50	36	11	0
4411	90	15.4	1284	50	36	11	0
4412	139	14.6	1230	48	27	13	0
4413	127	14.6	1230	48	27	13	0
4414	86	13.6	1171	38	28	6	0
4415	83	14.1	1207	46	30	6	0
4416	125	14.1	1207	46	30	6	0
4417	92	13.6	1161	42	29	7	0
4418	122	13.6	1161	42	29	7	0
4419	111	12.9	1115	45	27	0	0
4420	125	12.9	1115	45	27	0	0
4421	95	12.6	1073	45	24	6	0
4422	104	12.6	1073	45	24	6	0
4423	160	12.6	1073	45	24	6	0
4424	82	9.9	801	41	27	6	0
4425	83	10.2	810	48	28	8	0
4426	71	13.1	1098	48	24	10	0
4427	70	13.1	1098	48	24	10	0
4428	0	8.1	704	29	16	0	0
4429	79	11.1	896	45	26	11	0
4430	25	6.5	521	20	23	5	0
4431	39	5.8	492	24	12	0	0
4432	36	7.2	593	32	20	0	0
4433	60	8.3	679	30	17	10	0
4434	59	10.8	908	41	22	7	0
4435	76	10.3	849	40	23	9	0
4436	86	10.3	849	40	23	9	0
4437	66	9.0	730	41	18	8	0
4438	65	8.5	676	36	19	11	0
4439	72	8.5	715	23	15	11	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4440	83	9.8	829	38	19	5	0
4441	78	10.0	838	38	21	6	0
4442	37	13.5	1077	62	37	9	0
4443	153	7.7	578	36	26	11	0
4444	164	7.7	578	36	26	11	0
4445	137	5.8	470	29	17	0	0
4446	133	5.8	470	29	17	0	0
4447	138	5.8	470	29	17	0	0
4448	140	8.3	660	34	19	11	0
4449	76	9.6	786	38	22	8	0
4450	147	9.6	786	38	22	8	0
4451	95	9.6	813	28	21	7	0
4452	136	9.6	813	28	21	7	0
4453	117	10.9	914	29	23	13	0
4454	83	10.9	914	29	23	13	0
4455	86	11.8	980	46	20	13	0
4456	77	11.8	980	46	20	13	0
4457	84	12.9	1121	33	24	8	0
4458	98	17.1	1479	55	35	4	0
4459	101	17.1	1479	55	35	4	0
4460	141	33.3	2682	144	95	19	0
4461	83	61.1	4726	291	218	38	0
4462	105	61.1	4726	291	218	38	0
4463	84	58.8	4561	280	206	36	0
4464	93	58.8	4561	280	206	36	0
4465	135	42.3	3359	190	136	21	0
4466	92	42.3	3359	190	136	21	0
4467	104	33.2	2670	144	98	16	0
4468	135	33.2	2670	144	98	16	0
4469	130	31.0	2500	128	91	18	0
4470	89	26.6	2162	108	82	9	0
4471	96	26.6	2162	108	82	9	0
4472	77	23.7	1956	90	65	9	0
4473	86	23.7	1956	90	65	9	0
4474	67	19.7	1599	88	52	9	0
4475	88	20.5	1668	92	56	8	0
4476	102	20.5	1668	92	56	8	0
4477	112	22.0	1842	84	50	9	0
4478	81	22.1	1831	85	52	13	0
4479	81	22.1	1831	85	52	13	0
4480	74	22.4	1888	81	53	8	0
4481	108	22.4	1888	81	53	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4482	113	21.0	1777	75	48	8	0
4483	89	20.4	1724	77	46	7	0
4484	92	20.4	1724	77	46	7	0
4485	93	20.4	1724	77	46	7	0
4486	93	23.3	1931	100	60	4	0
4487	49	22.2	1857	87	56	5	0
4488	78	22.2	1857	87	56	6	0
4489	79	22.8	1883	89	61	9	0
4490	74	21.7	1796	85	54	11	0
4491	63	18.6	1568	72	42	6	0
4492	35	17.4	1453	69	40	8	0
4493	46	15.4	1294	48	36	11	0
4494	74	13.3	1049	66	36	11	0
4495	65	12.3	988	58	30	8	0
4496	42	13.2	1124	44	29	6	0
4497	43	13.8	1141	50	35	8	0
4498	65	14.3	1175	52	36	10	0
4499	85	14.5	1181	58	38	9	0
4500	57	13.3	1084	54	31	12	0
4501	44	13.3	1100	46	31	11	0
4502	63	13.6	1130	50	32	8	0
4503	57	13.9	1130	52	36	11	0
4504	63	14.4	1270	17	40	4	0
4505	56	15.4	1260	57	38	14	0
4506	79	16.4	1332	64	45	11	0
4507	51	16.6	1344	65	46	11	0
4508	63	16.9	1375	68	46	10	0
4509	66	16.3	1324	64	43	12	0
4510	72	16.3	1324	64	43	12	0
4511	67	16.9	1319	60	41	32	0
4512	71	16.0	1253	71	49	15	0
4513	52	14.4	1143	61	41	13	0
4514	77	16.6	1318	66	48	16	0
4515	68	15.3	1288	47	43	5	0
4516	59	16.7	1374	66	41	10	0
4517	73	17.1	1423	66	41	8	0
4518	93	17.8	1470	72	45	8	0
4519	87	18.4	1516	79	49	5	0
4520	78	15.2	1193	71	47	12	0
4521	80	15.2	1193	71	47	12	0
4522	85	29.1	2246	143	99	21	0
4523	137	15.0	1170	72	46	13	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4524	144	15.0	1170	72	46	13	0
4525	96	11.7	916	56	39	7	0
4526	142	12.0	959	46	27	17	0
4527	100	7.0	556	25	19	8	0
4528	38	7.0	556	25	19	8	0
4529	43	10.4	832	39	23	15	0
4530	20	5.5	406	30	15	9	0
4531	53	7.3	538	33	23	15	0
4532	8	8.2	625	29	22	18	0
4533	78	7.0	576	20	18	8	0
4534	63	7.0	576	21	18	8	0
4535	54	8.9	724	34	21	9	0
4536	65	11.2	908	35	24	17	0
4537	56	12.2	999	41	30	11	0
4538	59	12.3	1033	38	24	13	0
4539	57	13.3	1110	46	32	8	0
4540	60	15.6	1263	55	45	13	0
4541	4	7.7	604	24	22	14	0
4542	123	7.7	577	28	23	18	0
4543	34	8.2	648	33	21	11	0
4544	97	8.2	648	33	21	11	0
4545	100	10.0	815	31	28	10	0
4546	126	10.0	815	31	28	10	0
4547	110	11.3	945	39	23	10	0
4548	95	11.3	945	39	23	10	0
4549	100	12.9	1072	45	32	7	0
4550	76	10.0	803	37	29	10	0
4551	90	10.0	803	37	29	10	0
4552	162	15.0	1248	60	32	9	0
4553	162	15.0	1248	60	32	9	0
4554	88	14.4	1229	45	28	10	0
4555	85	14.4	1229	45	28	10	0
4556	135	15.1	1282	53	27	11	0
4557	95	15.1	1282	53	27	11	0
4558	104	18.2	1510	58	37	21	0
4559	91	18.2	1510	58	37	21	0
4560	103	25.0	2046	94	54	25	0
4561	90	25.0	2046	94	54	25	0
4562	128	26.1	2191	96	53	17	0
4563	100	26.1	2191	97	53	17	0
4564	97	21.8	1803	79	51	16	0
4565	100	19.7	1646	55	41	23	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4566	73	19.7	1646	55	41	23	0
4567	93	18.9	1606	65	32	14	0
4568	87	18.9	1606	65	32	14	0
4569	116	18.9	1606	65	32	14	0
4570	104	17.8	1489	59	39	14	0
4571	122	17.8	1489	59	39	14	0
4572	89	18.9	1558	77	40	14	0
4573	76	18.9	1558	77	40	14	0
4574	129	19.7	1664	61	41	14	0
4575	114	19.7	1664	61	41	14	0
4576	84	19.4	1653	58	38	14	0
4577	74	20.0	1661	60	41	24	0
4578	130	20.0	1661	60	41	24	0
4579	62	15.0	1212	65	39	11	0
4580	103	14.8	1235	49	29	14	0
4581	83	14.8	1235	49	29	14	0
4582	98	17.9	1490	59	40	15	0
4583	82	16.6	1402	61	34	9	0
4584	84	16.6	1402	61	34	9	0
4585	90	16.4	1390	49	31	15	0
4586	111	16.4	1390	49	31	15	0
4587	46	20.5	1771	52	41	12	0
4588	55	18.0	1535	53	30	16	0
4589	95	18.0	1535	53	30	16	0
4590	85	16.8	1412	56	35	13	0
4591	72	16.7	1346	67	37	19	0
4592	59	16.7	1333	67	37	22	0
4593	65	16.3	1286	66	37	24	0
4594	93	16.3	1286	66	37	24	0
4595	76	16.3	1286	66	37	24	0
4596	76	15.3	1249	60	29	19	0
4597	105	15.7	1269	59	38	18	0
4598	58	13.3	1045	46	38	19	0
4599	98	13.3	1045	46	38	19	0
4600	91	14.3	1084	58	31	15	16
4601	104	14.3	1084	58	31	15	16
4602	57	16.2	1302	41	27	18	16
4603	65	16.2	1302	41	27	18	16
4604	114	14.3	1128	35	29	17	16
4605	62	10.6	793	22	29	15	16
4606	85	10.0	793	32	29	15	0
4607	73	8.8	689	29	25	14	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4608	91	7.0	550	24	20	10	0
4609	105	7.0	550	24	20	10	0
4610	96	7.1	526	32	28	9	0
4611	82	7.1	526	32	28	9	0
4612	76	7.7	609	28	20	12	0
4613	92	8.3	666	27	18	14	0
4614	74	8.8	663	38	27	14	0
4615	71	8.8	663	38	27	14	0
4616	68	5.7	416	27	17	11	0
4617	76	5.8	418	28	22	11	0
4618	52	5.0	389	16	14	8	0
4619	30	3.6	259	17	14	7	0
4620	56	3.1	212	16	12	8	0
4621	64	3.6	249	19	13	9	0
4622	51	4.8	307	29	22	11	0
4623	70	3.9	248	25	16	12	0
4624	90	3.9	248	25	16	12	0
4625	30	4.3	268	22	19	14	0
4626	30	4.9	317	26	18	17	0
4627	22	4.5	296	22	16	16	0
4628	25	4.4	308	24	16	10	0
4629	25	6.4	456	39	19	11	0
4630	31	5.9	446	28	15	11	0
4631	40	5.9	406	22	20	19	0
4632	34	6.0	432	22	19	16	0
4633	44	6.1	419	25	17	23	0
4634	51	5.8	424	26	15	15	0
4635	61	7.2	498	39	20	22	0
4636	58	6.5	450	28	19	21	0
4637	63	7.9	551	30	26	25	0
4638	61	11.6	913	41	31	17	0
4639	56	11.7	881	53	38	16	0
4640	73	11.7	881	53	38	17	0
4641	54	9.3	696	45	26	17	0
4642	70	7.9	576	45	26	12	0
4643	86	5.4	334	34	22	19	0
4644	140	5.4	334	34	22	19	0
4645	79	7.2	514	34	22	19	0
4646	145	6.6	514	25	18	11	0
4647	101	6.6	514	25	18	11	0
4648	117	6.4	501	24	15	11	0
4649	131	6.1	504	22	10	7	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4650	90	7.3	545	31	25	13	0
4651	34	7.0	524	27	22	13	0
4652	76	7.6	591	34	20	11	0
4653	49	7.1	529	32	20	14	0
4654	125	7.3	566	26	18	15	0
4655	120	8.0	604	29	25	16	0
4656	82	8.0	604	29	25	15	0
4657	85	7.8	597	38	18	12	0
4658	75	8.5	608	35	27	22	0
4659	107	10.0	759	35	27	22	0
4660	67	9.8	745	37	26	21	0
4661	79	9.8	745	37	26	21	0
4662	79	9.8	745	37	26	21	0
4663	87	10.0	843	28	19	12	0
4664	77	10.5	859	36	20	14	0
4665	77	12.0	998	36	19	19	0
4666	118	12.0	998	36	19	19	0
4667	64	12.7	1039	51	27	11	0
4668	92	12.7	1039	51	27	11	0
4669	82	12.6	1013	48	26	18	0
4670	85	12.6	1013	48	26	18	0
4671	107	10.7	879	31	19	19	0
4672	116	10.7	879	31	19	19	0
4673	109	11.2	917	28	26	18	0
4674	82	11.2	917	28	26	18	0
4675	98	11.7	943	44	17	21	0
4676	84	11.1	885	33	22	23	0
4677	73	11.1	885	33	22	23	0
4678	89	13.6	1075	54	31	20	0
4679	77	13.6	1075	54	31	20	0
4680	108	11.4	974	28	22	11	0
4681	119	13.2	1119	37	28	10	0
4682	147	13.2	1119	37	28	10	0
4683	120	13.2	1119	37	28	10	0
4684	96	13.4	1100	44	29	16	0
4685	110	13.3	1116	40	26	14	0
4686	110	13.2	1132	36	22	12	0
4687	123	11.6	956	33	29	12	0
4688	99	11.6	956	33	29	12	0
4689	90	13.2	1100	52	24	10	0
4690	87	12.7	1049	45	27	13	0
4691	83	12.2	998	38	29	15	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4692	86	12.5	998	47	29	18	0
4693	99	10.9	870	47	19	18	0
4694	107	9.7	729	38	28	19	0
4695	75	9.7	729	38	28	19	0
4696	65	10.1	777	48	24	16	0
4697	105	11.6	931	36	29	17	0
4698	109	11.6	931	36	29	17	0
4699	129	15.1	1291	39	27	15	0
4700	83	14.3	1203	40	30	14	0
4701	73	13.5	1115	41	32	14	0
4702	71	15.1	1247	50	37	14	0
4703	80	16.4	1385	58	30	11	0
4704	96	16.4	1385	58	30	11	0
4705	92	14.3	1214	52	23	11	0
4706	25	14.2	1200	50	24	13	0
4707	18	14.6	1250	40	21	16	0
4708	88	15.1	1263	40	34	15	0
4709	76	15.0	1195	64	34	18	0
4710	35	12.9	1016	42	38	18	0
4711	81	8.5	677	34	22	10	0
4712	37	7.8	628	27	14	14	0
4713	66	7.8	628	27	14	15	0
4714	67	11.1	898	39	27	14	0
4715	57	9.9	756	39	31	16	0
4716	48	9.7	778	35	20	16	0
4717	35	8.0	650	21	16	16	0
4718	31	9.1	764	21	13	16	0
4719	45	10.4	812	37	28	18	0
4720	42	11.1	860	38	29	21	0
4721	47	10.3	860	18	15	21	0
4722	62	12.8	1039	48	25	17	0
4723	68	12.7	1094	28	20	15	0
4724	69	12.9	1100	28	25	14	0
4725	58	13.3	1138	34	14	20	0
4726	64	13.3	1138	34	14	20	0
4727	92	12.3	1013	41	20	18	0
4728	66	15.5	1314	52	20	18	0
4729	66	14.4	1232	47	21	13	0
4730	65	19.1	1667	47	31	13	0
4731	65	23.6	2100	54	29	17	0
4732	65	20.0	1712	64	35	14	0
4733	69	20.0	1712	64	35	14	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4734	134	20.0	1712	64	35	14	0
4735	99	17.1	1438	66	32	12	0
4736	83	16.6	1380	63	26	18	0
4737	102	16.7	1380	63	26	22	0
4738	82	16.6	1431	45	25	15	0
4739	89	16.6	1431	45	25	15	0
4740	82	16.6	1407	43	24	23	0
4741	77	16.6	1407	43	24	23	0
4742	80	17.5	1458	63	35	16	0
4743	90	17.5	1458	63	35	16	0
4744	123	16.9	1465	49	25	13	0
4745	123	16.9	1465	49	25	13	0
4746	91	16.9	1465	49	25	13	0
4747	69	16.9	1465	49	25	13	0
4748	90	17.5	1515	58	21	13	0
4749	94	17.8	1517	58	31	14	0
4750	82	17.7	1517	56	31	13	0
4751	55	12.2	1014	46	23	12	0
4752	74	12.2	1014	46	23	12	0
4753	99	17.5	1518	46	28	14	0
4754	49	17.1	1466	60	24	13	0
4755	90	17.1	1466	60	24	13	0
4756	94	16.5	1439	49	22	12	0
4757	89	15.5	1328	52	25	11	0
4758	96	15.5	1328	52	25	11	0
4759	78	15.5	1328	52	25	11	0
4760	73	15.8	1349	44	26	15	0
4761	83	16.6	1458	44	22	11	0
4762	116	16.2	1391	50	24	14	0
4763	78	16.2	1413	48	21	12	0
4764	107	16.3	1413	48	23	12	0
4765	126	15.4	1338	40	26	10	0
4766	79	15.4	1338	40	26	11	0
4767	110	15.1	1324	38	19	13	0
4768	54	16.7	1480	43	20	10	0
4769	83	16.9	1471	49	19	15	0
4770	92	16.9	1471	49	21	15	0
4771	95	16.3	1419	43	26	11	0
4772	74	14.0	1181	38	29	15	0
4773	80	14.0	1181	38	28	15	0
4774	56	15.6	1330	49	25	14	0
4775	84	11.7	984	44	20	10	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4776	72	11.9	962	45	24	16	0
4777	81	15.3	1369	33	19	10	0
4778	77	15.4	1369	33	20	10	0
4779	123	15.0	1291	45	24	12	0
4780	86	15.0	1291	45	23	12	0
4781	71	14.8	1319	31	20	9	0
4782	103	14.8	1319	31	21	9	0
4783	90	15.0	1314	45	22	8	0
4784	127	15.5	1314	45	24	19	0
4785	99	15.9	1368	39	24	19	0
4786	156	16.4	1421	33	24	19	0
4787	75	16.2	1421	33	24	16	0
4788	132	14.9	1302	30	20	16	0
4789	99	14.9	1302	30	20	16	0
4790	75	14.7	1262	38	22	17	0
4791	77	15.6	1334	40	25	18	0
4792	90	15.6	1334	40	25	18	0
4793	33	17.4	1504	48	28	14	0
4794	115	17.4	1504	48	28	14	0
4795	41	17.6	1465	64	29	19	0
4796	29	16.2	1372	45	20	25	0
4797	54	16.2	1421	33	24	16	0
4798	124	14.9	1302	30	20	16	0
4799	93	14.9	1302	30	20	16	0
4800	95	14.7	1262	38	22	17	0
4801	75	15.6	1334	40	25	18	0
4802	35	15.6	1334	40	25	18	0
4803	32	17.4	1504	48	28	14	0
4804	101	17.4	1504	48	28	14	0
4805	82	17.6	1465	64	29	19	0
4806	98	16.2	1372	45	20	25	0
4807	127	7.7	606	22	19	15	0
4808	106	7.8	606	26	19	15	0
4809	122	5.2	392	26	11	10	0
4810	114	5.2	392	26	11	10	0
4811	52	4.4	297	21	9	18	0
4812	120	5.0	282	31	15	27	0
4813	48	5.7	463	15	10	11	0
4814	91	5.7	463	15	10	11	0
4815	110	7.2	568	22	20	13	0
4816	82	7.9	619	28	17	15	0
4817	104	7.9	619	28	17	15	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4818	75	8.6	716	24	19	10	0
4819	117	8.6	716	24	19	10	0
4820	125	8.7	762	20	12	9	0
4821	109	8.7	762	20	12	9	0
4822	115	9.2	783	26	14	11	0
4823	130	9.2	783	26	15	11	0
4824	80	10.7	868	38	22	15	0
4825	119	10.7	868	38	22	15	0
4826	81	9.6	760	36	24	14	0
4827	110	8.5	651	35	26	12	0
4828	103	8.0	630	29	20	13	0
4829	79	8.0	630	29	19	13	0
4830	106	11.1	962	20	21	12	0
4831	103	10.7	907	24	22	11	0
4832	78	10.7	907	24	23	12	0
4833	97	11.1	934	24	24	14	0
4834	86	10.2	855	22	19	15	0
4835	92	10.3	900	20	15	10	0
4836	74	10.7	924	22	19	12	0
4837	89	10.9	924	24	22	12	0
4838	100	11.1	933	29	20	15	0
4839	91	11.1	933	29	20	14	0
4840	44	10.8	916	28	16	14	0
4841	65	9.9	835	30	18	10	0
4842	97	9.9	835	30	17	10	0
4843	98	10.1	865	21	17	14	0
4844	106	10.2	865	21	19	13	0
4845	110	10.7	908	24	18	14	0
4846	119	10.7	908	27	18	14	0
4847	94	11.6	981	31	19	14	0
4848	106	11.5	981	31	19	13	0
4849	70	11.8	997	34	21	12	0
4850	84	8.8	715	25	20	14	0
4851	116	8.9	715	27	21	14	0
4852	49	11.2	957	25	21	12	0
4853	80	11.2	957	28	21	10	0
4854	96	11.4	972	29	23	9	0
4855	81	11.8	1008	39	22	8	0
4856	113	10.5	895	34	17	9	0
4857	63	11.7	1000	34	20	10	0
4858	94	11.7	1000	34	20	11	0
4859	48	10.5	895	30	18	10	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4860	88	10.2	842	35	17	15	0
4861	83	10.4	842	38	19	15	0
4862	101	10.5	858	40	20	12	0
4863	108	10.4	858	40	20	10	0
4864	110	9.8	849	22	18	9	0
4865	108	9.9	849	22	18	11	0
4866	120	10.2	846	34	19	12	0
4867	95	9.9	856	25	13	11	0
4868	64	9.9	856	25	13	10	0
4869	108	10.9	945	24	16	11	0
4870	96	10.9	945	26	16	12	0
4871	86	9.8	856	24	13	10	0
4872	96	10.5	910	25	18	9	0
4873	107	10.7	910	35	19	8	0
4874	103	9.6	825	30	16	7	0
4875	111	10.0	870	38	10	6	0
4876	105	9.9	870	30	12	6	0
4877	93	9.0	770	29	14	7	0
4878	99	9.1	770	28	16	8	0
4879	118	11.0	968	26	18	7	0
4880	89	12.5	1129	27	12	8	0
4881	104	12.5	1129	27	12	7	0
4882	107	14.0	1273	27	12	9	0
4883	108	13.9	1273	30	12	6	0
4884	92	14.3	1273	36	20	7	0
4885	93	15.2	1352	36	20	8	0
4886	82	11.4	1028	22	11	9	0
4887	88	11.2	1028	22	11	4	0
4888	80	10.6	945	26	14	5	0
4889	82	11.4	1007	22	16	9	0
4890	96	15.0	1370	30	14	8	0
4891	96	15.1	1370	30	14	10	0
4892	106	16.1	1423	44	19	10	0
4893	104	16.1	1423	44	19	11	0
4894	69	16.0	1431	38	16	12	0
4895	68	4.0	221	25	24	13	0
4896	1	10.1	795	33	28	15	0
4897	65	6.6	457	26	25	18	0
4898	29	7.2	544	30	22	12	0
4899	99	10.5	899	29	20	7	0
4900	75	10.8	928	25	18	13	0
4901	58	17.7	1558	37	22	17	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4902	79	17.7	1558	37	22	17	0
4903	98	14.1	1226	32	25	12	0
4904	79	12.2	1057	31	19	10	0
4905	106	12.2	1057	31	19	10	0
4906	77	12.5	1054	28	24	17	0
4907	62	12.1	999	34	27	15	0
4908	75	10.4	876	24	21	13	0
4909	61	10.4	876	24	21	13	0
4910	71	10.3	864	26	25	9	0
4911	41	11.7	1005	32	20	11	0
4912	67	11.6	1005	32	15	12	0
4913	94	11.4	984	24	22	11	0
4914	69	11.2	984	24	17	10	0
4915	47	13.7	1226	29	16	9	0
4916	79	13.8	1226	35	17	9	0
4917	32	12.5	1113	29	13	11	0
4918	49	12.4	1113	24	10	11	0
4919	112	12.4	1113	24	10	11	0
4920	73	13.5	1192	32	18	10	0
4921	112	14.7	1295	37	20	9	0
4922	80	16.3	1466	43	14	8	0
4923	60	15.1	1350	31	17	11	0
4924	58	15.1	1350	31	17	11	0
4925	107	14.5	1308	23	18	10	0
4926	61	15.6	1409	38	14	9	0
4927	113	15.6	1409	38	14	8	0
4928	73	15.5	1408	28	13	11	0
4929	81	17.4	1546	40	21	12	0
4930	44	16.4	1491	33	15	9	0
4931	89	17.0	1529	34	18	11	0
4932	61	17.0	1529	34	18	11	0
4933	68	17.8	1587	42	21	12	0
4934	72	17.1	1529	40	19	12	0
4935	71	11.2	932	48	18	10	0
4936	69	11.2	932	48	18	9	0
4937	100	11.9	1002	38	22	11	0
4938	87	18.2	1606	50	23	11	0
4939	23	18.0	1601	40	21	13	0
4940	86	16.7	1478	46	18	11	0
4941	80	16.2	1439	46	15	11	0
4942	73	16.8	1540	35	10	11	0
4943	71	18.4	1625	52	13	17	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4944	76	18.5	1625	52	16	17	0
4945	84	18.2	1630	47	16	11	0
4946	61	17.7	1630	29	14	11	0
4947	82	18.4	1630	45	17	16	0
4948	62	18.1	1601	45	17	16	0
4949	63	17.7	1592	43	15	12	0
4950	90	17.0	1528	40	15	12	0
4951	74	17.0	1528	40	15	12	0
4952	70	15.6	1405	40	13	10	0
4953	68	15.6	1405	40	13	10	0
4954	95	16.2	1447	39	16	11	0
4955	96	16.2	1447	39	16	11	0
4956	78	16.6	1482	33	14	18	0
4957	90	12.7	1091	42	18	9	0
4958	81	12.5	1112	32	16	7	0
4959	96	12.5	1112	32	16	7	0
4960	65	16.6	1513	45	10	6	0
4961	82	16.2	1461	43	10	10	0
4962	82	15.6	1407	35	13	10	0
4963	48	15.6	1407	35	13	10	0
4964	56	16.4	1471	40	14	11	0
4965	74	16.4	1471	40	14	11	0
4966	69	15.6	1397	39	12	11	0
4967	81	15.6	1404	40	15	8	0
4968	76	16.1	1433	46	15	10	0
4969	70	15.7	1393	48	14	9	0
4970	64	11.1	965	37	12	8	0
4971	95	11.1	965	37	12	8	0
4972	94	15.7	1387	39	20	10	0
4973	78	15.1	1361	42	15	6	0
4974	70	15.1	1361	42	15	6	0
4975	75	14.6	1299	39	14	9	0
4976	77	14.4	1272	36	17	10	0
4977	84	14.4	1272	36	17	10	0
4978	65	12.3	1049	42	20	8	0
4979	75	13.7	1184	47	21	8	0
4980	81	13.7	1184	47	21	8	0
4981	66	17.9	1606	47	18	8	0
4982	95	17.0	1529	43	15	11	0
4983	55	16.5	1464	43	17	12	0
4984	72	17.0	1486	53	22	10	0
4985	77	17.0	1486	53	22	10	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4986	48	17.7	1597	43	19	8	0
4987	48	18.2	1643	57	20	0	0
4988	48	18.2	1643	57	20	0	0
4989	48	18.7	1643	57	22	12	0
4990	55	17.0	1501	43	22	12	0
4991	53	14.7	1271	40	21	14	0
4992	58	10.2	880	30	13	11	0
4993	113	10.2	880	30	13	11	0
4994	139	13.4	1136	46	21	11	0
4995	104	13.4	1136	46	21	11	0
4996	113	22.2	1924	66	38	13	0
4997	98	22.2	1924	66	38	13	0
4998	114	22.2	1924	66	38	13	0
4999	112	17.0	1469	48	29	11	0
5000	84	15.0	1306	47	22	8	0
5001	91	15.0	1306	47	22	8	0
5002	95	10.8	895	43	19	10	0
5003	98	9.5	778	35	19	10	0
5004	61	13.7	1179	35	24	11	0
5005	104	13.7	1179	35	24	11	0
5006	89	12.9	1137	33	17	9	0
5007	80	14.5	1290	39	19	6	0
5008	58	14.6	1296	41	19	6	0
5009	69	14.8	1314	41	17	7	0
5010	88	15.0	1337	40	19	7	0
5011	72	15.0	1337	40	19	7	0
5012	98	15.0	1337	40	19	7	0
5013	96	16.0	1404	49	19	11	0
5014	88	16.3	1431	49	19	11	0
5015	83	15.9	1410	43	21	10	0
5016	85	15.6	1389	36	22	8	0
5017	83	15.9	1415	44	20	8	0
5018	100	16.3	1440	51	18	8	0
5019	126	17.1	1478	51	31	10	0
5020	127	17.0	1478	43	31	10	0
5021	71	17.6	1536	53	26	9	0
5022	69	17.1	1542	52	22	0	0
5023	101	17.1	1542	52	22	0	0
5024	47	13.0	1089	55	22	9	0
5025	78	16.7	1458	55	22	9	0
5026	40	17.1	1478	58	23	12	0
5027	87	17.1	1478	58	23	12	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5028	89	17.0	1467	63	24	8	0
5029	87	17.2	1467	63	26	12	0
5030	73	16.6	1438	50	26	12	0
5031	83	17.8	1562	50	26	9	0
5032	128	17.8	1562	50	26	9	0
5033	92	19.0	1654	62	27	9	0
5034	110	19.6	1723	60	24	11	0
5035	49	19.6	1723	60	24	11	0
5036	46	18.6	1648	51	22	11	0
5037	65	18.7	1636	52	27	11	0
5038	64	21.1	1859	61	31	10	0
5039	86	21.2	1859	61	31	11	0
5040	88	30.2	2644	92	46	13	0
5041	77	30.2	2644	92	46	13	0
5042	71	24.2	2125	76	34	10	0
5043	66	21.1	1825	71	32	11	0
5044	68	19.5	1723	50	26	12	0
5045	87	16.5	1424	47	28	12	0
5046	58	18.4	1611	48	28	12	0
5047	84	18.4	1611	48	27	12	0
5048	89	17.7	1572	51	23	6	0
5049	110	17.7	1572	51	23	6	0
5050	102	18.1	1572	56	23	14	0
5051	115	17.7	1519	57	26	14	0
5052	85	17.1	1490	57	26	6	0
5053	96	17.5	1490	57	26	16	0
5054	120	16.8	1453	49	23	16	0
5055	52	16.0	1377	46	26	12	0
5056	58	16.3	1408	46	26	12	0
5057	97	16.0	1408	43	22	11	0
5058	90	15.9	1405	46	20	8	0
5059	102	16.7	1464	50	23	10	0
5060	119	17.6	1524	55	26	11	0
5061	105	17.6	1524	55	28	11	0
5062	101	16.4	1429	50	28	6	0
5063	105	17.1	1463	50	29	16	0
5064	126	17.2	1463	54	29	16	0
5065	53	16.9	1458	54	27	10	0
5066	88	15.3	1332	47	20	10	0
5067	72	15.3	1332	48	22	10	0
5068	103	10.2	830	48	22	7	0
5069	86	10.1	837	40	24	6	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5070	63	10.3	837	40	24	9	0
5071	112	14.3	1246	44	19	10	0
5072	102	16.1	1427	39	27	6	0
5073	82	16.1	1427	39	27	6	0
5074	82	16.3	1428	50	23	8	0
5075	107	16.5	1449	46	26	8	0
5076	117	17.0	1470	41	28	15	0
5077	93	15.5	1381	45	19	6	0
5078	92	15.6	1381	45	19	8	0
5079	61	19.7	1746	57	27	8	0
5080	74	18.1	1593	51	26	10	0
5081	107	16.2	1420	44	26	9	0
5082	62	18.7	1659	45	29	9	0
5083	46	18.5	1634	53	24	10	0
5084	56	18.3	1631	50	22	9	0
5085	95	18.3	1632	51	21	8	0
5086	95	19.3	1633	67	33	15	0
RIO BRAVO Fm.							
5087	150	9.8	856	23	14	9	0
5088	171	8.6	743	18	14	9	0
5089	161	10.4	888	32	15	10	0
5090	124	10.4	888	32	15	10	0
5091	215	10.4	888	32	15	10	0
5092	137	10.4	888	32	15	10	0
5093	84	23.1	2104	49	24	8	0
5094	132	24.0	2178	52	31	6	0
5095	125	24.0	2178	52	31	6	0
5096	153	24.0	2178	52	31	6	0
5097	129	22.0	2000	42	30	7	0
5098	61	8.9	784	22	14	5	0
5099	13	11.6	1026	32	18	4	0
5100	48	12.4	1102	32	18	5	0
5101	39	15.1	1338	39	18	9	0
5102	40	16.2	1470	32	16	10	0
5103	35	11.1	956	34	17	9	0
5104	56	12.3	1083	37	19	5	0
5105	39	20.9	1914	34	25	9	0
5106	74	23.1	2120	42	23	9	0
5107	64	24.5	2250	45	27	8	0
5108	72	26.3	2408	50	30	9	0
5109	4	17.2	1508	49	27	8	0
5110	132	17.2	1508	49	27	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5111	89	19.3	1717	42	28	10	0
5112	132	19.3	1717	42	28	10	0
5113	112	26.7	2404	59	37	8	0
5114	129	26.7	2404	59	37	8	0
5115	108	34.7	3147	78	44	9	0
5116	115	34.8	3147	78	44	10	0
5117	101	34.9	3200	65	42	9	0
5118	121	34.9	3200	65	42	9	0
5119	158	26.4	2329	70	41	11	0
5120	131	26.4	2329	70	41	11	0
5121	130	26.4	2329	70	41	11	0
5122	125	24.1	2128	65	36	12	0
5123	135	24.1	2128	65	36	12	0
5124	124	27.6	2497	60	38	8	0
5125	167	27.6	2497	60	38	8	0
5126	143	24.7	2232	53	31	10	0
5127	132	24.7	2232	53	31	10	0
5128	119	24.7	2232	53	31	10	0
5129	139	24.9	2223	64	34	9	0
5130	107	24.9	2223	64	34	9	0
5131	108	24.1	2134	43	37	19	0
5132	105	24.3	2134	55	37	19	0
5133	113	22.9	2039	55	35	8	0
5134	107	23.0	2039	60	35	10	0
5135	113	19.4	1703	60	27	10	0
5136	125	19.5	1703	60	28	11	0
5137	110	14.9	1283	38	28	11	0
5138	105	17.5	1526	46	28	11	0
5139	115	17.3	1526	46	28	6	0
5140	137	17.3	1526	46	28	7	0
5141	131	18.2	1594	51	32	8	0
5142	132	18.2	1594	51	32	8	0
5143	122	18.2	1594	51	32	8	0
5144	113	16.9	1492	47	25	8	0
5145	146	17.0	1492	47	25	10	0
5146	125	14.6	1287	34	22	10	0
5147	121	14.6	1287	34	22	10	0
5148	107	13.1	1153	33	19	9	0
5149	123	13.1	1153	33	19	9	0
5150	109	11.7	1011	36	16	9	0
5151	159	11.6	1011	36	16	8	0
5152	109	11.8	1011	42	18	7	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5153	84	9.6	795	42	18	7	0
5154	78	6.6	528	22	17	8	0
5155	94	7.2	590	29	12	8	0
5156	56	7.2	590	29	12	8	0
5157	80	4.9	375	25	10	8	0
5158	54	6.0	479	25	11	9	0
5159	70	6.0	479	24	11	9	0
5160	82	7.9	655	24	18	9	0
5161	68	9.8	859	22	14	8	0
5162	62	10.9	963	28	18	4	0
5163	73	12.3	1067	35	21	8	0
5164	53	12.7	1067	41	20	14	0
5165	71	12.3	1031	41	20	14	0
5166	68	12.1	1046	34	23	7	0
5167	61	14.2	1240	43	23	7	0
5168	64	14.2	1240	43	20	8	0
5169	71	12.6	1102	34	19	9	0
5170	59	12.6	1102	34	19	9	0
5171	55	11.0	956	33	18	5	0
5172	73	11.0	956	33	18	5	0
5173	69	9.9	854	28	18	6	0
5174	71	9.4	801	24	19	8	0
5175	53	9.3	801	24	19	5	0
5176	53	11.8	1023	32	20	7	0
5177	43	12.8	1108	37	22	8	0
5178	41	12.1	1051	36	18	8	0
5179	37	4.5	336	13	15	11	0
5180	37	86.4	6592	386	332	69	0
5181	45	82.4	6441	359	286	55	0
5182	68	31.9	2565	136	94	18	0
5183	64	14.4	1167	54	42	9	0
5184	92	9.7	808	35	24	5	0
5185	50	9.7	808	35	24	5	0
5186	49	15.6	1305	59	33	9	0
5187	66	15.6	1305	59	33	9	0
5188	85	9.2	719	37	30	10	0
5189	49	8.4	662	38	23	9	0
5190	49	8.7	725	27	20	8	0
5191	72	8.7	725	27	20	8	0
5192	108	7.7	657	18	16	8	0
5193	110	7.8	657	18	16	9	0
5194	105	8.1	685	26	12	9	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5195	88	8.1	685	26	12	8	0
5196	51	7.7	645	26	15	8	0
5197	68	8.4	704	29	15	8	0
5198	68	7.1	606	20	13	7	0
5199	39	7.3	615	29	11	7	0
5200	66	7.3	615	29	11	7	0
5201	87	7.0	593	25	11	7	0
5202	71	7.8	671	22	15	6	0
5203	74	7.8	671	22	15	6	0
5204	120	8.0	694	16	15	6	0
5205	93	8.0	694	16	15	7	0
5206	84	9.3	803	29	14	7	0
5207	87	8.7	748	22	16	8	0
5208	85	9.0	771	25	16	8	0
5209	77	9.3	794	28	16	8	0
5210	99	8.6	722	29	18	7	0
5211	73	8.5	718	29	18	6	0
5212	5	8.5	713	29	19	5	0
5213	8	9.7	836	31	18	5	0
5214	5	9.7	836	31	18	5	0
5215	1	9.4	797	30	18	6	0
5216	19	8.9	758	29	18	6	0
5217	4	8.9	758	29	18	6	0
5218	4	8.9	758	29	18	4	0
5219	27	9.4	810	25	19	6	0
5220	41	10.0	850	27	25	5	0
5221	56	9.6	799	27	24	9	0
5222	61	9.6	799	27	24	9	0
5223	6	9.6	799	27	24	9	0
5224	6	11.0	930	33	25	8	0
5225	6	11.0	930	33	25	8	0
5226	3	10.9	901	34	24	11	0
5227	44	11.6	983	34	24	10	0
5228	70	11.6	983	34	24	10	0
5229	77	11.6	993	31	26	6	0
5230	58	11.6	1007	30	23	7	0
5231	60	7.1	561	32	22	5	0
5232	74	6.8	535	32	19	6	0
5233	66	6.8	535	32	19	6	0
5234	71	9.1	775	30	18	6	0
5235	62	9.0	771	23	19	7	0
5236	83	9.0	755	28	16	9	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5237	80	9.1	789	24	13	9	0
5238	79	9.0	780	25	12	8	0
5239	80	9.0	780	25	12	8	0
5240	86	9.2	775	31	16	8	0
5241	94	9.2	775	31	16	8	0
5242	82	8.9	766	23	15	9	0
5243	65	9.2	780	27	17	9	0
5244	59	8.6	751	19	13	8	0
5245	140	8.6	745	19	14	8	0
5246	9	8.0	647	33	16	9	0
5247	53	8.0	647	33	16	9	0
5248	70	9.8	856	26	16	7	0
5249	66	9.9	873	23	15	7	0
5250	58	9.6	837	22	18	7	0
5251	82	11.0	951	31	17	8	0
5252	117	11.0	951	31	17	8	0
5253	79	11.3	985	32	19	7	0
5254	101	11.3	985	32	19	7	0
5255	79	11.5	1005	28	20	7	0
5256	124	11.5	1005	28	20	7	0
5257	72	12.4	1066	31	21	11	0
5258	64	11.8	1018	35	17	11	0
5259	66	11.5	992	32	18	11	0
5260	66	10.3	881	23	17	12	0
5261	72	11.4	973	34	18	12	0
5262	70	11.7	1015	32	17	11	0
5263	95	11.8	1015	32	17	12	0
5264	67	12.3	1065	28	20	12	0
5265	86	12.3	1065	28	20	13	0
5266	23	10.3	838	36	21	13	0
5267	58	14.3	1227	40	22	14	0
5268	88	14.6	1264	42	20	14	0
5269	78	14.6	1264	42	20	14	0
5270	97	16.7	1439	41	29	16	0
5271	56	15.3	1315	38	26	16	0
5272	74	13.1	1106	36	23	15	0
5273	19	11.0	941	26	15	15	0
5274	61	11.0	941	26	15	16	0
5275	86	13.3	1020	68	44	11	0
5276	120	6.5	524	20	14	12	0
5277	36	6.3	518	15	13	11	0
5278	89	6.9	568	23	12	9	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5279	120	6.9	568	23	12	9	0
5280	41	8.8	738	25	17	10	0
5281	70	15.1	1300	39	27	13	0
5282	91	10.8	934	25	20	10	0
5283	49	8.1	687	22	16	7	0
5284	78	8.1	687	22	16	7	0
5285	130	7.6	655	18	15	7	0
5286	77	7.6	655	18	15	5	0
5287	82	8.7	775	20	14	4	0
5288	89	9.6	835	22	16	9	0
5289	79	11.2	975	29	18	9	0
5290	95	11.2	975	29	18	9	0
5291	80	11.6	1018	29	18	7	0
5292	88	11.6	1018	29	18	7	0
5293	100	13.4	1192	32	19	7	0
5294	80	9.7	805	34	21	8	0
5295	66	9.7	816	35	19	7	0
5296	64	9.7	816	35	19	7	0
5297	75	12.6	1098	37	17	8	0
5298	69	11.8	1027	31	18	8	0
5299	60	11.1	982	24	15	9	0
5300	58	10.1	879	20	18	9	0
5301	84	11.0	968	27	19	5	0
5302	68	10.0	888	22	17	5	0
5303	83	10.0	888	22	17	5	0
5304	95	11.9	1044	32	17	7	0
5305	74	12.5	1095	30	17	10	0
5306	62	10.9	947	28	20	7	0
5307	49	9.6	830	28	15	7	0
5308	45	9.6	830	28	15	7	0
5309	58	8.1	689	20	16	7	0
5310	76	6.9	592	17	9	8	0
5311	68	6.6	546	22	11	8	0
5312	40	6.3	532	15	12	8	0
5313	62	5.7	462	22	10	9	0
5314	66	6.4	514	19	16	9	0
5315	58	6.8	550	18	15	11	0
5316	48	6.6	562	14	10	10	0
5317	77	6.8	559	23	13	10	0
5318	72	6.7	541	18	17	11	0
5319	86	6.7	541	18	17	11	0
5320	39	7.7	650	19	17	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5321	66	5.5	427	22	12	10	0
5322	85	5.6	427	22	12	13	0
5323	84	7.8	661	17	11	12	0
5324	69	9.0	751	27	15	12	0
5325	47	8.8	735	23	17	12	0
5326	63	8.5	722	26	9	12	0
5327	84	8.9	755	23	16	11	0
5328	49	8.4	712	23	14	11	0
5329	83	8.7	730	23	15	12	0
5330	62	8.7	730	23	15	12	0
5331	69	8.1	687	15	14	12	0
5332	47	7.9	654	22	13	13	0
5333	59	7.8	652	15	14	13	0
5334	58	8.3	693	17	14	15	0
5335	56	8.1	669	18	15	15	0
5336	52	8.4	695	24	12	14	0
5337	75	8.4	695	24	12	14	0
5338	95	6.3	494	19	14	14	0
5339	33	7.0	551	22	16	13	0
5340	58	9.1	775	21	14	13	0
5341	61	11.2	959	29	15	14	0
5342	42	13.2	1139	38	17	13	0
5343	50	14.4	1239	40	23	12	0
5344	82	14.4	1239	40	23	12	0
5345	96	14.4	1239	40	23	12	0
5346	77	14.4	1225	42	22	16	0
5347	93	14.9	1282	38	24	16	0
5348	121	13.8	1182	31	25	16	0
5349	57	13.9	1182	31	25	17	0
5350	64	13.3	1132	30	24	17	0
5351	73	11.4	974	27	16	15	0
5352	73	9.1	752	21	17	15	0
5353	46	9.6	792	28	17	15	0
5354	62	9.4	774	28	17	15	0
5355	87	7.3	574	28	15	14	0
5356	95	7.3	574	28	15	14	0
5357	78	6.2	469	24	16	14	0
5358	78	6.3	469	24	16	15	0
5359	98	9.1	764	24	12	15	0
5360	89	8.2	671	20	15	15	0
5361	70	11.7	991	29	18	16	0
5362	75	11.7	991	29	18	16	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5363	71	17.7	1512	49	32	16	0
5364	72	22.7	1855	71	44	35	0
5365	77	22.9	1855	71	44	40	0
5366	116	28.0	2300	92	65	31	0
5367	82	33.8	2786	115	73	35	0
5368	78	33.8	2786	115	73	35	0
5369	87	33.8	2786	115	73	35	0
5370	76	20.5	1653	74	54	22	0
5371	149	20.5	1653	74	54	22	0
5372	72	10.5	870	36	21	11	0
5373	35	11.7	975	40	23	12	0
5374	53	12.3	1034	39	22	12	0
5375	25	16.9	1357	58	44	22	0
5376	34	3.7	256	20	14	7	0
5377	44	9.1	698	38	28	14	0
5378	59	9.1	698	38	28	14	0
5379	125	9.8	838	24	19	8	0
5380	122	9.8	838	24	19	9	0
5381	115	4.3	356	8	11	7	0
5382	3	4.4	364	18	8	4	0
5383	34	4.5	374	8	12	6	0
5384	47	4.6	371	10	11	10	0
5385	36	7.2	590	20	17	9	0
5386	45	6.2	518	15	13	9	0
5387	31	6.5	553	20	12	6	0
5388	33	7.6	651	19	14	7	0
5389	44	8.0	679	20	16	8	0
5390	36	8.5	716	27	15	9	0
5391	34	8.7	747	25	14	7	0
5392	62	7.0	585	18	15	8	0
5393	70	6.7	553	22	14	7	0
5394	49	6.8	564	17	16	8	0
5395	55	6.9	577	23	13	7	0
5396	92	6.9	577	23	13	7	0
5397	27	6.7	570	13	14	7	0
5398	59	7.0	601	18	13	6	0
5399	38	7.1	599	21	14	7	0
5400	81	6.9	596	21	11	5	0
5401	38	7.2	606	16	16	8	0
5402	63	7.2	606	16	16	8	0
5403	53	7.9	677	22	14	7	0
5404	77	8.3	709	22	16	7	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5405	47	8.3	709	20	16	7	0
5406	79	6.8	550	27	17	7	0
5407	93	6.3	520	20	14	7	0
5408	48	9.3	800	27	17	6	0
5409	74	9.1	777	30	16	6	0
5410	56	9.1	777	30	16	6	0
5411	60	9.4	791	34	16	7	0
5412	52	9.5	821	27	15	7	0
5413	66	9.7	841	26	17	7	0
5414	61	9.1	788	26	15	7	0
5415	51	9.1	788	26	15	6	0
5416	68	9.9	855	35	14	6	0
5417	59	10.0	862	26	19	6	0
5418	75	10.0	862	26	19	6	0
5419	60	10.1	871	36	14	5	0
5420	60	9.7	846	31	15	5	0
5421	40	9.5	820	30	16	6	0
5422	62	6.8	553	27	17	6	0
5423	42	7.2	593	26	18	6	0
5424	92	10.5	923	28	16	6	0
5425	54	13.9	1241	37	15	7	0
5426	68	15.1	1354	37	18	6	0
5427	45	15.2	1377	37	14	6	0
5428	67	14.4	1281	29	22	8	0
5429	71	14.8	1327	36	15	8	0
5430	55	14.8	1327	36	15	8	0
5431	150	18.9	1723	41	19	8	0
5432	93	18.9	1723	41	19	8	0
5433	118	22.8	2087	42	24	8	0
5434	78	25.4	2350	42	27	7	0
5435	36	21.8	2008	40	23	6	0
5436	100	15.9	1474	34	17	0	0
5437	99	16.0	1474	35	17	0	0
5438	94	15.0	1379	35	17	0	0
5439	108	15.0	1379	37	17	0	0
5440	103	14.3	1303	37	17	0	0
5441	107	14.6	1311	37	18	6	0
5442	104	14.6	1311	33	18	6	0
5443	104	14.6	1311	33	18	6	0
5444	103	13.4	1226	29	17	0	0
5445	128	13.8	1226	36	19	7	0
5446	75	12.9	1120	36	22	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5447	92	12.8	1120	31	22	8	0
5448	112	12.9	1120	34	22	8	0
5449	60	11.7	1047	34	18	0	0
5450	63	12.2	1079	30	20	5	0
5451	75	10.3	923	30	16	0	0
5452	64	9.7	861	31	14	0	0
5453	66	9.7	861	31	14	0	0
5454	70	14.6	1319	31	19	6	0
5455	76	14.6	1319	31	19	6	0
5456	77	17.8	1613	34	23	7	0
5457	89	17.8	1613	34	23	7	0
5458	129	18.6	1662	40	31	7	0
5459	111	18.6	1662	40	31	7	0
5460	75	20.3	1798	59	39	0	0
5461	91	20.7	1798	63	39	7	0
5462	80	23.1	1956	77	52	10	0
5463	80	28.2	2330	102	77	14	0
5464	73	28.2	2330	102	77	14	0
5465	79	28.3	2330	102	77	17	0
5466	7	22.2	1761	86	73	16	0
5467	77	14.9	1146	69	51	13	0
5468	84	28.4	2241	121	96	18	0
5469	88	28.4	2241	121	96	18	0
5470	93	21.5	1773	73	60	13	0
5471	101	21.5	1773	73	60	13	0
5472	105	10.5	870	37	23	9	0
5473	135	10.5	870	37	23	9	0
5474	124	8.0	661	23	22	7	0
5475	122	8.0	661	23	22	7	0
5476	112	13.4	1125	45	32	7	0
5477	92	13.3	1125	45	32	5	0
5478	96	5.5	464	23	14	0	0
5479	97	3.3	250	7	13	7	0
5480	103	3.3	250	7	13	7	0
5481	101	6.6	533	26	16	7	0
5482	112	14.9	1217	50	42	12	0
5483	77	14.9	1217	50	42	12	0
5484	92	16.1	1313	61	43	12	0
5485	109	16.1	1313	61	43	11	0
5486	95	16.1	1313	61	43	11	0
5487	107	13.9	1144	46	36	11	0
5488	106	7.0	578	22	18	5	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5489	89	7.0	578	22	18	5	0
5490	118	13.3	1093	48	35	8	0
5491	121	13.3	1093	48	35	8	0
5492	141	13.0	1086	47	32	6	0
5493	106	13.0	1086	47	32	6	0
5494	105	13.1	1086	47	33	7	0
5495	105	8.3	616	43	33	7	0
5496	86	12.0	879	60	48	13	0
5497	77	19.2	1590	63	52	13	0
5498	76	19.1	1590	63	52	10	0
5499	90	23.7	1964	76	66	14	0
5500	89	24.6	2032	87	66	14	0
5501	70	28.4	2361	94	76	16	0
5502	68	28.4	2361	94	76	16	0
5503	123	28.4	2361	94	76	16	0
5504	100	27.5	2271	94	72	18	0
5505	108	27.5	2271	94	72	18	0
5506	122	23.0	1911	84	57	13	0
5507	111	23.0	1911	84	57	13	0
5508	107	19.2	1611	62	51	9	0
5509	84	15.8	1308	59	38	9	0
5510	98	15.8	1308	59	38	9	0
5511	120	17.5	1484	66	43	0	0
5512	122	17.5	1484	66	43	0	0
5513	113	17.5	1484	66	43	0	0
5514	122	17.0	1457	62	38	0	0
5515	106	17.8	1522	62	38	4	0
5516	97	17.7	1522	61	38	4	0
5517	87	16.5	1391	50	39	11	0
5518	95	16.5	1391	50	39	11	0
5519	94	14.8	1244	43	35	10	0
5520	122	14.8	1244	43	35	10	0
5521	114	15.6	1324	48	36	9	0
5522	132	15.6	1324	48	36	9	0
5523	153	16.5	1395	53	36	9	0
5524	136	16.1	1395	53	35	0	0
5525	107	16.9	1395	61	43	10	0
5526	143	15.0	1211	61	43	10	0
5527	113	13.2	1048	62	36	9	0
5528	129	13.2	1048	62	36	9	0
5529	133	15.5	1255	62	36	15	0
5530	92	15.0	1255	46	32	15	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5531	50	13.1	1071	46	31	13	0
5532	49	12.3	1014	46	29	10	0
5533	38	11.4	972	46	26	0	0
5534	49	12.3	999	45	32	11	0
5535	49	11.5	958	39	29	6	0
5536	71	11.6	958	43	29	6	0
5537	89	11.0	944	43	24	0	0
5538	106	11.1	944	43	26	0	0
5539	111	10.5	909	31	26	0	0
5540	115	11.3	978	39	26	0	0
5541	73	11.5	978	39	26	4	0
5542	135	11.6	978	39	25	7	0
5543	114	11.9	1000	41	27	7	0
5544	77	12.2	1021	43	28	7	0
5545	22	12.2	1021	43	28	8	0
5546	53	8.0	633	32	25	8	0
5547	49	7.4	599	33	24	0	0
5548	59	9.6	819	35	24	0	0
5549	41	9.5	819	34	22	0	0
5550	46	9.7	819	34	23	5	0
5551	8	10.0	819	34	24	9	0
5552	50	9.8	812	34	23	9	0
5553	4	9.7	804	33	22	9	0
5554	3	10.0	819	34	24	9	0
5555	5	9.8	812	34	23	9	0
5556	31	9.7	804	33	22	9	0
5557	58	9.9	800	35	25	10	0
5558	50	8.2	571	43	40	11	0
5559	103	8.7	595	45	42	14	0
5560	51	9.5	574	50	47	18	12
5561	100	9.5	574	51	47	18	12
5562	143	9.1	596	50	46	18	0
5563	100	11.2	765	59	58	16	0
5564	110	11.3	765	62	58	16	0
5565	96	15.0	1049	75	68	24	0
5566	164	15.0	1049	76	68	24	0
5567	38	14.8	1125	65	55	14	0
5568	67	15.7	1140	66	56	19	10
5569	93	14.8	1089	65	54	18	5
5570	102	13.8	1038	60	51	16	0
5571	114	13.8	1038	62	51	16	0
5572	144	13.3	957	55	46	17	12

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5573	128	13.3	957	55	46	17	12
5574	140	12.6	907	58	45	17	7
5575	68	9.2	615	57	45	13	0
5576	129	9.2	615	59	45	13	0
5577	87	14.8	1121	65	52	18	0
5578	109	17.6	1325	79	63	21	0
5579	99	17.6	1325	80	63	21	0
5580	21	16.2	1266	62	56	15	0
5581	70	15.3	1187	65	51	15	0
5582	41	11.9	931	45	39	12	0
5583	73	12.3	900	40	42	16	11
5584	68	11.6	924	40	38	10	0
5585	96	11.6	924	40	38	10	0
5586	40	12.5	1008	45	41	7	0
5587	89	12.5	1008	47	41	7	0
5588	74	13.2	1045	48	39	16	0
5589	70	14.3	1108	47	39	17	8
5590	109	14.1	1139	45	38	17	0
5591	89	13.3	1135	48	34	0	0
5592	54	13.8	1135	43	38	0	9
5593	78	13.7	1106	35	38	9	9
5594	54	12.4	1026	30	33	13	0
5595	109	12.9	1035	41	36	15	0
5596	43	13.0	1052	41	36	15	0
5597	79	12.8	1052	41	35	11	0
5598	41	13.2	991	41	37	18	13
5599	47	12.8	956	36	37	18	13
5600	83	11.5	864	34	34	14	12
5601	116	12.8	972	42	37	14	12
5602	108	12.8	972	42	37	13	12
5603	91	13.6	1106	45	37	13	0
5604	84	14.2	1146	46	42	13	0
5605	82	14.2	1146	46	42	13	0
5606	136	14.4	1146	46	42	18	0
5607	53	13.7	1089	42	42	18	0
5608	60	11.8	969	32	28	16	0
5609	72	10.8	903	32	28	8	0
5610	68	10.5	863	33	28	8	0
5611	28	10.3	832	31	27	13	0
5612	71	10.3	832	31	27	13	0
5613	52	9.9	833	37	27	0	0
5614	64	11.6	912	38	30	6	11

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5615	76	12.4	986	37	37	16	0
5616	97	12.4	986	37	37	16	0
5617	103	14.3	1153	47	41	14	0
5618	79	15.2	1211	45	39	12	10
5619	58	15.0	1241	47	40	10	0
5620	68	13.9	1081	41	40	13	10
5621	75	13.9	1081	41	40	13	10
5622	63	13.6	1062	49	40	6	11
5623	79	12.3	967	41	39	15	0
5624	40	11.3	967	34	31	0	0
5625	105	11.6	940	35	32	13	0
5626	53	11.6	940	35	32	13	0
5627	83	11.0	899	40	30	8	0
5628	99	10.3	818	30	27	18	0
5629	121	10.3	818	30	27	18	0
5630	118	11.8	872	33	31	24	10
5631	153	11.8	872	33	31	24	10
5632	132	11.8	872	33	31	24	10
5633	114	10.3	800	24	20	17	11
5634	125	10.3	800	24	20	17	11
5635	106	10.9	909	28	20	16	0
5636	94	10.2	848	22	19	17	0
5637	46	9.5	769	29	20	15	0
5638	133	9.5	769	29	20	15	0
5639	98	10.0	812	29	21	17	0
5640	81	10.0	812	29	21	17	0
5641	107	8.8	712	23	22	15	0
5642	79	9.1	735	22	18	18	0
5643	56	9.1	735	22	18	18	0
5644	61	7.4	584	21	18	15	0
5645	77	7.4	584	21	18	15	0
5646	50	5.4	404	21	14	14	0
5647	108	5.1	383	22	14	10	0
5648	113	5.1	383	22	14	10	0
5649	95	5.1	383	20	14	10	0
5650	86	4.7	352	20	12	11	0
5651	125	4.7	337	19	10	15	0
5652	138	4.2	310	19	13	7	0
5653	100	3.8	278	22	10	6	0
5654	63	3.8	278	22	10	6	0
5655	94	4.2	323	21	11	5	0
5656	64	3.8	276	21	10	7	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5657	61	3.7	272	18	12	6	0
5658	60	4.6	353	23	12	6	0
5659	59	4.3	316	23	13	6	0
5660	57	4.1	295	24	12	7	0
5661	56	4.0	295	18	12	7	0
5662	54	2.3	131	18	11	7	0
5663	48	2.3	113	21	9	13	0
5664	14	2.2	119	21	8	9	0
5665	15	2.2	116	20	12	8	0
5666	17	2.5	133	20	12	11	0
5667	22	3.7	240	29	11	9	0
5668	3	3.0	173	27	12	10	0
5669	19	2.6	142	24	12	8	0
5670	22	2.7	150	26	13	8	0
5671	21	3.0	169	27	14	9	0
5672	28	2.8	150	25	15	9	0
5673	16	4.8	328	30	15	11	0
5674	16	3.5	253	15	10	8	0
5675	45	3.5	257	16	11	8	0
5676	63	3.6	276	15	10	5	0
5677	63	4.0	312	17	11	5	0
5678	47	4.0	304	19	11	6	0
5679	52	3.8	281	19	12	6	0
5680	53	4.3	327	21	13	6	0
5681	90	3.9	297	21	10	5	0
5682	75	4.5	364	20	10	5	0
5683	61	4.4	364	11	10	5	0
5684	49	4.4	362	13	8	6	0
5685	49	4.5	381	14	9	4	0
5686	18	4.8	379	21	13	4	0
5687	25	4.8	380	20	15	4	0
5688	28	5.0	416	15	10	5	0
5689	44	4.7	369	17	11	8	0
5690	46	4.1	330	15	11	5	0
5691	106	4.2	340	18	6	7	0
5692	58	4.9	396	19	7	8	0
5693	26	4.7	374	18	9	7	0
5694	25	3.9	301	18	9	7	0
5695	38	3.8	298	15	10	6	0
5696	45	3.8	304	13	9	6	0
5697	47	4.1	321	12	12	7	0
5698	30	4.2	332	15	9	7	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5699	40	4.3	330	17	10	8	0
5700	122	4.0	316	18	10	4	0
5701	44	4.0	336	10	6	7	0
5702	65	4.2	318	20	10	9	0
5703	64	4.9	388	20	10	9	0
5704	27	4.3	375	15	8	0	0
5705	43	4.4	380	14	10	0	0
5706	53	4.0	329	9	9	7	0
5707	37	4.4	358	13	10	7	0
5708	73	4.4	358	13	10	7	0
5709	60	4.0	330	10	9	6	0
5710	113	4.6	388	14	8	5	0
5711	123	4.6	388	14	8	5	0
5712	65	3.1	236	14	8	5	0
5713	48	3.4	297	14	6	0	0
5714	54	3.4	297	14	6	0	0
5715	81	3.3	273	14	8	0	0
5716	69	3.6	310	15	8	0	0
5717	57	3.8	329	15	8	0	0
5718	49	3.8	313	16	10	0	0
5719	30	5.8	497	16	13	4	0
5720	34	5.7	489	15	12	4	0
5721	22	4.9	428	11	9	3	0
5722	23	4.3	362	12	11	3	0
5723	42	4.7	385	18	13	3	0
5724	37	4.8	397	14	12	5	0
5725	42	5.2	431	19	12	4	0
5726	30	5.0	394	10	14	12	0
5727	39	4.9	405	14	10	7	0
5728	32	5.1	391	18	9	14	0
5729	29	5.1	400	14	10	13	0
5730	32	4.1	357	13	10	0	0
5731	27	4.3	359	10	11	5	0
5732	1	4.3	359	10	11	5	0
5733	28	4.6	358	15	10	10	0
5734	42	4.5	356	13	10	10	0
5735	52	5.0	388	17	11	11	0
5736	59	4.8	388	17	11	6	0
5737	58	5.1	402	19	11	9	0
5738	51	5.4	437	15	14	8	0
5739	43	5.7	469	20	10	8	0
5740	7	5.7	469	20	10	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5741	4	5.7	469	20	10	8	0
5742	1	5.1	426	14	9	7	0
5743	51	5.3	440	14	10	7	0
5744	39	4.6	405	12	10	0	0
5745	42	4.7	379	19	9	7	0
5746	44	3.9	298	15	10	7	0
5747	4	4.6	377	10	13	7	0
5748	36	4.6	377	10	13	7	0
5749	75	3.1	236	11	9	6	0
5750	4	4.4	360	13	10	6	0
5751	33	4.5	355	15	13	7	0
5752	23	4.2	353	10	8	6	0
5753	48	3.2	245	10	8	7	0
5754	34	4.7	398	12	9	6	0
5755	25	4.5	349	14	12	8	0
5756	25	5.2	415	15	13	8	0
5757	32	5.3	425	15	13	8	0
5758	34	5.7	452	22	13	9	0
5759	33	5.3	422	14	14	9	0
5760	36	5.5	434	15	16	9	0
5761	47	6.2	486	20	15	11	0
5762	36	6.3	512	17	14	10	0
5763	58	6.6	536	23	13	10	0
5764	35	6.3	506	21	16	9	0
5765	30	6.0	490	17	16	8	0
5766	44	6.2	503	20	14	8	0
5767	18	5.3	437	13	13	7	0
5768	20	5.4	430	19	15	7	0
5769	24	3.9	307	15	10	6	0
5770	22	3.8	304	10	9	7	0
5771	32	5.0	410	18	10	6	0
5772	28	4.9	404	13	11	6	0
5773	30	4.8	402	17	8	6	0
5774	33	5.5	444	21	13	7	0
5775	29	5.4	423	19	13	11	0
5776	25	5.2	425	17	10	8	0
5777	28	5.0	408	13	12	8	0
5778	24	5.8	457	19	15	9	0
5779	37	5.6	438	21	16	9	0
5780	34	5.5	451	15	12	8	0
5781	46	5.9	478	20	13	9	0
5782	30	6.2	508	23	12	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5783	27	6.1	505	23	10	8	0
5784	29	6.7	543	18	15	11	0
5785	49	6.7	547	17	16	9	0
5786	46	6.5	508	23	15	11	1
5787	28	6.0	484	15	15	8	1
5788	22	6.4	509	20	17	8	2
5789	38	6.0	500	22	10	6	1
5790	43	5.9	471	17	15	9	1
5791	34	5.5	451	12	17	7	0
5792	23	5.3	433	19	11	6	0
5793	25	5.5	440	16	12	8	1
5794	1	5.6	448	16	13	11	0
5795	27	5.6	448	21	11	8	0
5796	49	5.6	441	20	14	7	1
5797	38	5.9	477	14	16	7	1
5798	46	6.2	511	16	15	7	1
5799	48	6.2	526	14	13	6	0
5800	37	7.2	599	25	13	6	1
5801	62	6.8	562	20	13	8	1
5802	47	6.7	550	16	14	8	2
5803	46	6.7	552	17	13	9	2
5804	53	6.7	552	17	13	9	1
5805	52	7.2	605	22	14	8	0
5806	57	8.4	684	28	16	12	0
5807	68	8.1	681	26	14	8	0
5808	77	8.2	681	26	14	11	0
5809	81	7.3	581	24	16	12	0
5810	52	8.3	685	25	16	12	0
5811	46	8.4	685	27	17	13	0
5812	49	8.4	687	27	18	10	0
5813	61	7.8	650	20	17	9	0
5814	62	7.9	658	21	19	8	0
5815	61	7.9	663	21	19	8	0
5816	53	8.1	663	30	17	10	0
5817	57	8.1	663	30	15	10	0
5818	75	8.0	650	23	19	11	0
5819	66	8.4	688	29	16	11	0
5820	80	8.4	700	22	17	10	0
5821	74	8.4	700	22	17	9	1
5822	62	7.7	634	26	14	10	0
5823	81	7.5	619	20	15	11	0
5824	84	7.5	619	20	15	11	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5825	79	7.4	612	20	15	10	0
5826	64	7.3	612	20	15	9	0
5827	78	7.4	606	28	15	9	0
5828	90	7.5	606	28	15	10	0
5829	105	6.9	567	26	13	9	0
5830	140	6.9	567	26	13	8	0
5831	104	6.9	567	26	13	8	0
5832	131	7.0	574	19	18	9	0
5833	113	7.0	574	19	18	8	1
5834	125	7.4	595	29	16	9	1
5835	134	7.4	595	29	16	9	1
5836	132	7.4	595	29	16	9	0
5837	126	6.7	543	24	16	8	0
5838	129	6.8	543	24	16	8	1
5839	107	6.1	493	19	14	8	0
5840	100	6.0	479	23	14	9	0
5841	86	5.6	432	22	14	11	0
5842	66	8.9	679	35	25	14	1
5843	65	7.4	579	27	20	12	0
5844	88	7.0	566	25	16	10	0
5845	94	7.1	566	25	16	10	1
5846	102	6.5	530	17	16	8	1
5847	62	9.2	772	29	21	6	0
5848	63	9.2	772	29	21	6	0
5849	51	9.2	772	29	21	7	0
5850	45	4.9	391	14	13	7	0
5851	61	6.3	514	23	11	8	0
5852	54	6.6	560	15	14	8	0
5853	52	7.0	584	18	15	8	0
5854	51	8.3	696	26	15	8	0
5855	64	7.9	664	24	14	8	0
5856	69	7.9	664	24	14	9	0
5857	80	8.5	745	21	14	5	0
5858	85	8.5	745	21	14	5	0
5859	87	10.2	854	32	15	14	0
5860	97	11.1	973	26	16	9	0
5861	98	11.1	973	26	16	9	0
5862	115	12.6	1100	29	19	10	0
5863	102	12.6	1100	29	19	10	0
5864	112	20.3	1731	66	36	14	0
5865	130	20.3	1731	66	36	14	0
5866	104	29.2	2427	99	64	25	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5867	126	29.2	2427	99	64	25	0
5868	101	29.9	2457	108	68	27	0
5869	94	29.9	2457	108	68	27	0
5870	103	24.7	2046	87	54	23	0
5871	100	7.2	578	21	17	11	0
5872	8	6.8	548	17	18	12	0
5873	52	6.3	529	18	13	7	0
5874	42	6.3	529	14	16	7	0
5875	39	6.6	542	20	14	8	0
5876	37	7.2	580	19	18	12	0
5877	16	7.4	601	24	14	11	0
5878	16	7.9	646	25	16	11	0
5879	31	7.8	617	27	20	13	0
5880	37	8.4	700	21	16	10	1
5881	40	8.4	704	26	17	8	1
5882	8	8.5	691	27	20	12	0
5883	32	10.0	817	35	23	12	0
5884	69	10.7	894	30	19	13	1
5885	61	10.7	894	30	19	13	1
5886	27	10.4	849	36	22	13	0
5887	30	10.9	899	34	25	13	0
5888	6	16.4	1344	57	36	18	1
5889	191	16.4	1344	57	36	18	1
5890	120	12.8	1023	43	30	19	0
5891	105	12.8	1023	43	30	19	0
5892	90	13.1	1066	46	29	16	0
5893	136	13.4	1110	49	28	12	0
5894	133	13.3	1110	49	26	12	0
5895	150	13.6	1134	49	26	12	0
5896	152	13.8	1159	49	26	12	0
5897	180	13.7	1159	48	23	12	0
5898	174	16.4	1386	56	28	15	0
5899	164	19.1	1613	63	32	18	0
5900	169	19.1	1613	63	32	18	0
5901	164	19.1	1613	63	32	18	0
5902	140	10.8	911	39	18	7	1
5903	139	10.7	911	39	18	7	0
5904	119	10.7	911	39	18	7	0
5905	150	7.6	642	22	15	7	0
5906	141	7.6	642	22	15	7	0
5907	164	9.2	761	35	15	10	0
5908	140	9.2	761	35	13	10	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5909	145	9.1	761	35	13	10	0
5910	143	7.9	685	28	11	5	0
5911	157	6.8	609	20	9	0	0
5912	135	6.8	609	20	9	0	0
5913	151	9.2	789	11	21	11	0
5914	172	9.2	789	11	21	11	0
5915	136	10.2	872	24	20	9	0
5916	185	11.2	955	36	19	7	1
5917	182	11.1	955	36	19	7	0
5918	148	14.1	1218	40	25	10	0
5919	196	14.1	1218	40	25	10	0
5920	126	14.2	1218	40	25	10	1
5921	121	15.0	1323	44	28	0	1
5922	146	15.0	1323	44	28	0	0
5923	146	15.0	1323	44	28	0	0
5924	152	14.0	1210	47	20	9	0
5925	172	14.0	1210	47	20	9	0
5926	163	14.0	1210	47	20	9	0
5927	155	16.2	1387	52	24	14	0
5928	162	16.2	1387	52	24	14	0
5929	144	17.8	1546	48	28	14	0
5930	147	17.8	1546	48	28	14	0
5931	136	17.8	1546	48	28	14	0
5932	158	17.2	1480	55	27	12	0
5933	131	17.2	1480	55	27	12	0
5934	149	14.7	1264	42	23	11	1
5935	122	44.5	3586	176	116	39	1
5936	81	35.7	2893	140	93	29	1
5937	102	20.7	1695	77	47	19	1
5938	58	16.3	1340	63	36	15	0
5939	59	15.5	1278	55	33	12	2
5940	48	13.3	1120	37	30	10	1
5941	45	13.7	1136	48	26	13	2
5942	45	13.4	1108	41	26	16	1
5943	30	11.6	959	38	23	15	0
5944	32	11.5	949	37	24	14	0
5945	35	10.8	921	43	21	0	1
5946	21	9.2	763	26	19	11	1
5947	26	9.6	788	32	20	13	0
5948	31	9.8	793	36	20	13	0
5949	36	10.1	813	36	22	14	0
5950	24	10.3	825	34	22	14	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5951	53	10.0	825	34	19	11	2
5952	42	8.4	698	22	19	10	1
5953	42	5.6	458	20	10	9	0
5954	40	5.4	475	17	11	0	0
5955	44	8.3	696	30	14	7	0
5956	43	9.4	782	27	21	11	0
5957	52	10.0	818	24	22	16	0
5958	52	11.8	970	30	26	17	0
5959	54	11.2	940	35	19	13	0
5960	73	10.9	914	32	22	11	0
5961	71	11.3	928	36	22	17	0
5962	79	10.3	873	36	19	8	0
5963	72	11.0	933	37	16	11	0
5964	41	10.5	892	28	15	15	0
5965	57	10.7	892	33	18	15	0
5966	52	10.3	868	35	20	9	0
5967	48	9.9	825	35	19	9	0
5968	46	9.3	783	25	19	9	0
5969	51	8.7	762	32	15	0	0
5970	43	9.0	766	30	15	7	0
5971	50	8.2	712	33	15	0	0
5972	56	8.8	751	34	19	0	0
5973	55	8.5	729	23	15	8	0
5974	54	9.2	759	26	19	12	0
5975	54	9.5	814	26	18	7	0
5976	57	9.6	822	24	20	7	0
5977	74	9.6	822	24	20	7	0
5978	63	10.2	848	33	17	14	0
5979	51	9.3	801	22	15	10	0
5980	80	10.4	892	27	18	11	0
5981	71	9.9	853	31	18	6	0
5982	60	11.8	1004	40	18	10	0
5983	78	10.9	909	38	18	13	0
5984	68	10.9	909	38	18	13	0
5985	70	10.6	914	30	20	7	0
5986	80	11.0	942	37	15	9	0
5987	76	9.8	829	28	18	11	0
5988	61	11.7	981	38	22	12	0
5989	62	10.8	914	35	17	11	0
5990	65	10.8	914	35	17	11	0
5991	84	12.0	1010	43	19	11	0
5992	81	11.6	993	41	20	7	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5993	55	11.9	1013	41	20	9	0
5994	34	9.3	818	34	16	0	0
5995	24	8.7	726	31	17	7	0
5996	30	7.0	603	27	14	0	0
5997	27	7.1	594	23	14	7	0
5998	27	6.8	563	25	13	8	0
5999	35	7.0	574	22	16	8	0
6000	28	6.4	522	17	15	9	0
6001	36	6.9	556	28	12	10	0
6002	43	7.8	652	22	17	9	0
6003	35	6.8	564	20	13	8	0
6004	48	7.7	644	26	13	8	0
6005	45	8.4	707	22	15	12	0
6006	24	8.3	711	26	12	7	0
6007	24	7.9	697	26	15	0	0
6008	33	7.2	630	29	10	0	0
6009	36	8.1	653	28	16	13	0
6010	48	6.5	529	22	11	11	0
6011	65	6.5	529	22	11	11	0
6012	53	8.9	756	29	13	10	0
6013	46	9.1	792	31	9	7	0
6014	47	9.2	787	23	19	8	0
6015	45	9.0	770	22	17	9	0
6016	76	7.5	637	21	16	6	0
6017	132	7.1	591	20	14	10	0
6018	116	7.1	591	20	14	10	0
6019	129	7.1	591	19	14	10	0
6020	132	7.1	591	19	14	10	0
6021	135	7.9	686	22	12	6	0
6022	120	8.5	723	26	13	9	0
6023	134	8.5	723	26	13	9	0
6024	110	8.5	723	26	13	9	0
6025	122	8.6	736	25	12	9	0
6026	146	8.6	736	25	12	9	0
6027	143	9.3	807	28	14	6	0
6028	143	10.0	879	31	16	3	0
6029	143	11.5	969	34	20	14	0
6030	112	7.7	615	26	14	14	0
6031	100	5.2	418	19	10	8	0
6032	113	3.7	310	14	11	0	0
6033	39	4.1	324	11	11	7	0
6034	50	4.5	388	18	8	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6035	48	5.9	477	20	14	8	0
6036	77	5.4	456	15	12	4	0
6037	41	5.6	445	15	14	10	0
6038	75	5.7	453	18	10	12	0
6039	53	5.0	436	15	11	0	0
6040	56	5.5	438	18	12	9	0
6041	45	5.5	444	18	13	7	0
6042	39	5.8	481	20	13	5	0
6043	47	5.4	459	19	9	5	0
6044	46	5.2	455	19	9	0	0
6045	45	5.4	437	20	10	8	0
6046	3	4.1	307	15	10	11	0
6047	10	3.9	332	12	10	0	0
6048	35	3.9	326	13	11	0	0
6049	35	4.6	360	15	10	9	0
6050	18	4.3	341	18	9	7	0
6051	27	3.9	329	16	8	0	0
6052	29	4.0	331	14	12	0	0
6053	26	4.4	358	14	9	7	0
6054	38	4.5	358	16	9	7	0
6055	39	4.4	348	17	11	6	0
6056	24	5.1	411	19	10	7	0
6057	17	5.3	432	20	10	8	0
6058	21	5.4	432	20	12	8	0
6059	35	5.2	410	22	14	7	0
6060	37	6.0	489	19	15	6	0
6061	6	7.0	577	25	17	5	0
6062	42	7.1	577	25	19	6	0
6063	15	6.1	476	23	14	11	0
6064	33	7.3	593	30	14	9	0
6065	63	6.7	532	23	17	11	0
6066	109	6.7	532	23	17	11	0
6067	95	6.4	525	24	11	8	0
6068	62	6.9	569	24	15	8	0
6069	65	7.4	619	17	14	10	0
6070	60	7.9	659	27	15	9	0
6071	88	7.9	659	27	14	8	0
6072	79	8.1	682	26	12	9	0
6073	85	7.8	659	21	13	10	0
6074	64	7.8	659	21	14	9	0
6075	99	8.3	737	30	12	0	0
6076	77	8.3	737	30	12	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6077	89	8.4	717	22	15	8	0
6078	100	5.9	479	22	14	7	0
6079	44	5.8	480	24	16	0	0
6080	54	5.9	500	28	11	0	0
6081	45	7.5	631	29	12	7	0
6082	59	8.8	747	31	17	5	0
6083	62	8.6	732	24	16	7	0
6084	34	8.1	702	22	12	6	0
6085	35	8.0	703	21	18	0	0
6086	46	7.9	662	25	15	8	0
6087	35	7.6	659	26	11	5	0
6088	60	7.9	682	27	10	6	0
6089	64	8.1	677	27	15	8	0
6090	61	8.1	677	27	15	8	0
6091	86	7.5	644	19	12	7	0
6092	75	7.4	644	19	12	6	0
6093	67	7.6	655	23	12	6	0
6094	56	7.6	655	17	13	7	0
6095	65	8.6	715	30	18	7	0
6096	68	8.9	715	30	21	12	0
6097	59	7.8	620	24	21	12	0
6098	66	6.9	566	25	12	9	0
6099	53	8.0	637	26	17	15	0
6100	49	8.1	646	26	17	15	0
6101	51	8.5	702	26	20	9	0
6102	53	8.6	707	27	20	9	0
6103	64	8.9	748	28	15	10	0
6104	93	9.0	749	32	15	10	0
6105	63	9.2	780	32	13	10	0
6106	64	8.8	780	28	13	0	0
6107	54	9.5	864	27	11	0	0
6108	82	9.5	864	27	11	0	0
6109	60	9.9	846	26	21	7	0
6110	44	11.2	976	35	13	8	0
6111	41	12.9	1107	38	22	9	0
6112	72	11.9	1018	39	21	7	0
6113	75	11.5	997	34	19	8	0
6114	60	10.9	979	28	19	0	0
6115	61	11.9	1037	38	17	7	0
6116	66	10.8	893	31	20	17	0
6117	67	10.8	893	31	20	17	0
6118	78	13.6	1187	34	20	10	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6119	103	12.4	1035	43	24	12	0
6120	77	11.6	956	40	24	12	0
6121	62	9.4	809	28	14	9	0
6122	47	11.2	1014	33	14	0	0
6123	91	8.3	700	29	20	2	0
6124	78	8.5	699	28	19	9	0
6125	78	6.0	489	25	12	7	0
6126	29	6.0	482	23	18	5	0
6127	25	6.4	518	22	17	6	0
6128	51	7.2	607	23	12	7	0
6129	58	7.6	635	23	17	8	0
6130	50	9.0	753	25	19	9	0
6131	68	9.8	828	28	21	7	0
6132	65	9.3	829	23	11	5	0
6133	62	9.0	824	22	12	0	0
6134	49	9.1	825	22	12	0	0
6135	45	9.8	848	22	10	14	0
6136	61	8.1	742	15	12	0	0
6137	71	8.7	746	23	12	10	0
6138	67	10.1	868	23	14	13	0
6139	75	10.2	893	17	14	13	0
6140	65	10.0	893	15	12	10	0
6141	65	11.0	994	15	12	10	0
6142	71	11.0	1003	15	14	5	0
6143	68	10.8	1003	15	14	0	0
6144	68	11.8	1102	22	12	0	0
6145	80	12.8	1172	25	10	6	0
6146	62	13.3	1200	29	13	8	0
6147	61	14.0	1272	29	13	8	0
6148	49	14.4	1304	31	14	9	0
6149	91	14.4	1304	31	14	9	0
6150	130	14.8	1334	31	16	10	0
6151	142	15.2	1364	31	17	10	0
6152	180	15.1	1364	26	17	10	0
6153	156	15.1	1364	26	17	10	0
6154	127	17.2	1547	34	20	11	0
6155	127	19.3	1730	42	23	11	0
6156	127	22.2	1985	48	29	13	0
6157	177	25.0	2240	53	34	14	0
6158	135	30.0	2665	64	42	19	0
6159	152	30.0	2665	64	42	19	0
6160	152	30.0	2665	64	42	19	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6161	148	31.5	2791	70	45	21	0
6162	148	33.0	2916	75	47	22	0
6163	100	42.8	3757	103	67	29	0
6164	175	42.8	3757	103	67	29	0
6165	101	45.1	3911	119	78	32	0
6166	67	45.8	3911	121	78	32	13
6167	108	43.5	3778	121	71	28	0
6168	105	37.5	3244	105	63	26	0
6169	96	37.5	3244	105	63	26	0
6170	81	31.8	2765	87	50	22	0
6171	70	27.3	2377	78	43	18	0
6172	54	27.8	2409	78	45	19	0
6173	72	27.6	2409	68	45	19	0
6174	84	27.7	2409	69	45	21	0
6175	71	27.5	2393	69	45	21	0
6176	98	27.5	2393	69	45	21	0
6177	147	23.4	2018	64	38	21	0
6178	181	19.3	1643	58	30	20	0
6179	94	19.1	1519	53	32	21	20
6180	101	19.1	1519	53	32	21	20
6181	126	19.4	1562	54	36	20	17
6182	128	19.8	1605	54	39	19	14
6183	159	19.8	1605	54	39	19	14
6184	174	18.6	1599	44	34	17	0
6185	125	19.2	1656	47	35	17	0
6186	119	19.9	1713	50	35	17	0
6187	84	19.9	1713	50	35	17	0
6188	112	18.4	1543	39	29	17	13
6189	87	18.5	1543	44	29	17	13
6190	124	17.9	1495	44	27	16	13
6191	123	17.9	1495	44	27	16	13
6192	130	17.3	1467	44	27	15	7
6193	123	16.6	1438	44	27	14	0
6194	117	19.8	1722	49	34	15	0
6195	115	19.8	1722	49	34	15	0
6196	111	19.9	1722	49	34	18	0
6197	115	17.9	1543	40	30	18	0
6198	119	21.2	1852	49	33	18	0
6199	118	21.1	1852	49	33	16	0
6200	110	17.4	1479	41	25	9	14
6201	87	17.4	1479	41	25	9	14
6202	165	19.3	1668	50	28	11	7

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6203	87	21.2	1856	59	31	13	0
6204	115	21.2	1856	59	31	13	0
6205	139	21.0	1805	51	29	14	10
6206	125	21.0	1805	51	29	14	10
6207	156	18.2	1569	43	25	11	9
6208	137	15.4	1333	35	21	8	8
6209	148	17.6	1511	42	24	13	8
6210	141	19.7	1689	48	27	17	8
6211	158	19.7	1689	48	27	17	8
6212	204	19.7	1689	48	27	17	8
6213	223	18.8	1639	45	28	13	4
6214	120	17.9	1588	41	28	9	0
6215	110	16.8	1440	44	26	10	7
6216	113	16.8	1440	44	26	10	7
6217	100	18.8	1608	44	31	14	7
6218	93	16.8	1401	41	29	15	9
6219	92	14.7	1195	38	27	16	12
6220	91	22.1	1895	47	29	17	13
6221	91	9.8	794	33	21	13	0
6222	44	10.7	891	33	21	12	0
6223	65	11.6	979	35	22	11	0
6224	43	11.7	985	31	23	13	0
6225	56	11.5	966	29	22	16	0
6226	71	11.5	967	35	23	12	0
6227	89	11.5	967	35	23	12	0
6228	76	10.4	885	26	20	10	0
6229	62	5.5	444	20	11	9	0
6230	45	5.9	489	18	12	8	0
6231	29	5.9	483	21	13	7	0
6232	17	6.5	538	20	14	8	0
6233	15	6.3	530	21	14	5	0
6234	33	6.6	520	22	15	13	0
6235	15	6.6	524	24	15	10	0
6236	7	6.6	528	25	15	9	0
6237	21	5.3	432	16	10	9	0
6238	20	4.2	321	15	13	8	0
6239	14	2.6	198	16	10	0	0
6240	18	4.7	362	16	12	9	0
6241	18	5.1	408	18	10	9	0
6242	7	6.4	519	21	14	10	0
6243	24	7.9	674	23	12	9	0
6244	37	7.9	674	23	12	9	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6245	52	7.9	674	23	12	9	0
6246	68	9.8	833	21	19	13	0
6247	54	56.7	4713	169	123	47	13
6248	40	46.1	3803	145	111	45	0
6249	21	45.1	3711	145	111	45	0
6250	95	45.1	3711	145	111	45	0
6251	120	36.4	2926	119	87	34	15
6252	95	31.4	2538	99	71	30	15
6253	83	62.4	5108	198	145	56	15
6254	70	61.6	5108	198	145	56	0
6255	52	60.6	5033	192	141	55	0
6256	80	60.6	5033	192	141	55	0
6257	77	58.2	4853	179	131	53	0
6258	120	55.7	4641	171	126	53	0
6259	144	57.9	4818	180	134	53	0
6260	160	60.1	4995	188	142	53	0
6261	165	60.0	4995	188	142	51	0
6262	171	59.9	4995	188	142	49	0
6263	150	70.8	5777	245	179	69	0
6264	137	98.4	8014	344	255	93	0
6265	67	123.0	9951	422	324	122	9
6266	81	123.0	9951	422	324	122	9
6267	79	139.1	11221	467	375	144	11
6268	56	142.5	11446	488	389	151	11
6269	82	141.9	11446	488	389	151	0
6270	97	148.7	11982	516	409	158	0
6271	134	155.5	12518	544	428	164	0
6272	169	169.6	13626	596	474	180	0
6273	186	183.6	14733	647	519	195	0
6274	204	183.6	14733	647	519	195	0
6275	179	183.6	14733	647	519	195	0
6276	195	183.6	14733	647	519	195	0
6277	227	208.1	16659	735	593	226	0
6278	227	232.6	18585	822	666	257	0
6279	164	327.5	26106	1185	945	360	0
6280	133	327.5	26106	1185	945	360	0
6281	150	327.5	26106	1185	945	360	0
6282	168	364.2	28843	1351	1079	409	0
6283	196	400.8	31580	1517	1213	457	0
6284	152	401.1	31580	1517	1213	457	5
6285	136	434.1	34308	1580	1290	502	12
6286	156	434.1	34308	1580	1290	502	12

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6287	79	386.0	30421	1430	1165	449	5
6288	69	305.3	23810	1187	954	372	0
6289	54	265.2	20553	1059	850	325	0
6290	53	225.5	17518	892	710	280	0
6291	60	225.5	17518	892	710	280	0
6292	70	225.5	17518	892	710	280	0
6293	79	243.4	18941	979	764	287	0
6294	76	254.8	19940	997	782	300	0
6295	86	266.2	20938	1015	800	313	0
6296	65	251.0	19812	934	748	295	0
6297	56	252.2	19875	941	748	295	7
6298	61	230.8	18150	860	692	272	10
6299	53	209.5	16424	779	636	249	12
6300	53	138.6	10838	521	424	163	12
6301	59	138.3	10838	521	424	163	6
6302	63	138.0	10838	521	424	163	0
6303	62	123.6	9704	468	376	147	0
6304	50	109.8	8638	411	329	134	0
6305	64	94.6	7399	341	291	114	10
6306	76	62.4	4856	243	185	73	10
6307	59	82.5	6420	331	252	104	0
6308	67	95.5	7441	371	293	121	0
6309	57	95.5	7441	371	293	121	0
6310	76	98.2	7623	383	300	125	8
6311	58	101.0	7805	394	307	128	15
6312	74	86.5	6700	317	265	117	11
6313	66	81.9	6338	326	252	111	0
6314	101	88.2	6921	338	261	111	0
6315	69	86.4	6751	324	253	109	9
6316	40	48.4	3431	189	190	115	0
6317	77	56.9	4000	235	225	135	0
6318	77	57.5	4098	231	222	131	0
6319	87	81.1	6305	289	234	131	0
6320	4	67.4	5226	231	205	109	0
6321	40	55.6	4272	188	177	95	0
6322	26	38.7	2957	129	119	75	0
6323	21	35.8	2676	121	108	73	9
6324	28	27.7	1958	96	93	70	12
6325	23	24.7	1732	78	84	68	12
6326	5	24.3	1764	86	80	64	0
6327	16	24.2	1763	86	79	63	0
6328	10	21.9	1539	71	74	58	10

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6329	8	16.9	1253	55	52	43	0
6330	10	21.1	1566	73	58	43	10
6331	9	22.7	1720	68	60	42	14
6332	17	36.3	2933	98	83	49	12
6333	25	36.8	2980	110	83	49	7
6334	24	37.0	3002	117	86	51	0
6335	29	36.7	2983	120	84	48	0
6336	27	45.0	3673	146	104	56	0
6337	74	44.9	3673	146	104	54	0
6338	35	36.0	2926	108	86	49	0
6339	46	33.2	2684	117	77	43	0
6340	42	32.8	2684	107	72	42	0
6341	42	32.0	2621	103	70	41	0
6342	32	30.9	2534	100	67	39	0
6343	44	29.4	2418	98	61	36	0
6344	39	30.0	2462	98	62	38	0
6345	36	30.1	2478	95	62	38	0
6346	41	29.9	2474	87	62	39	0
6347	33	30.0	2426	87	56	39	15
6348	45	29.1	2414	92	57	35	0
6349	38	29.5	2461	84	55	38	0
6350	47	30.3	2535	94	57	35	0
6351	44	30.3	2535	94	56	35	0
6352	33	30.2	2548	93	54	31	0
6353	44	29.3	2464	87	54	33	0
6354	40	14.6	1211	41	30	18	0
6355	32	32.1	2704	100	59	32	0
6356	36	32.1	2679	96	63	37	0
6357	48	32.9	2774	101	64	31	0
6358	37	33.2	2788	98	64	37	0
6359	42	35.3	2968	98	71	39	0
6360	38	35.0	2939	107	69	36	0
6361	54	36.8	3071	117	70	41	0
6362	39	37.7	3171	120	70	38	0
6363	36	37.1	3117	117	72	35	0
6364	49	38.1	3174	111	70	37	12
6365	47	34.1	2879	110	62	30	0
6366	55	34.1	2879	110	62	30	0
6367	59	33.8	2749	106	65	35	17
6368	39	32.1	2584	101	65	35	17
6369	55	31.0	2581	101	59	34	0
6370	41	31.5	2640	99	60	34	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6371	38	32.1	2640	99	60	33	12
6372	44	30.4	2574	88	58	29	0
6373	40	30.3	2540	87	61	33	0
6374	46	30.3	2540	88	61	33	0
6375	49	31.7	2680	95	57	33	0
6376	44	33.1	2781	107	62	31	0
6377	51	34.9	2941	107	69	33	0
6378	41	36.3	3062	118	66	34	0
6379	46	33.9	2864	104	60	34	0
6380	54	33.5	2844	99	60	31	0
6381	46	32.8	2776	99	62	31	0
6382	56	33.3	2776	93	62	31	11
6383	52	33.1	2808	95	63	31	0
6384	40	34.5	2872	104	63	31	11
6385	43	34.2	2872	104	58	28	11
6386	48	33.6	2848	99	58	34	0
6387	30	32.8	2782	100	59	29	0
6388	26	34.2	2833	99	66	35	11
6389	35	32.8	2728	92	62	31	11
6390	47	32.3	2728	102	58	31	0
6391	42	31.8	2687	102	57	29	0
6392	58	32.7	2772	102	60	29	0
6393	52	34.5	2925	106	63	30	0
6394	126	34.5	2932	106	62	30	0
6395	58	34.5	2938	106	61	29	0
6396	35	34.4	2938	104	59	29	0
6397	48	31.2	2676	93	55	24	0
6398	42	28.0	2328	83	49	24	12
6399	61	34.1	2866	98	58	26	13
6400	44	33.4	2866	98	58	26	0
6401	30	34.1	2866	98	58	26	13
6402	48	29.8	2579	91	46	21	0
6403	41	31.5	2721	91	52	23	0
6404	48	36.7	3167	105	60	28	0
6405	51	36.7	3167	105	60	28	0
6406	53	34.7	2985	100	59	27	0
6407	72	28.6	2304	98	65	40	0
6408	57	41.5	3175	118	114	82	14
6409	56	39.1	3175	118	81	47	14
6410	53	38.3	3266	108	68	35	0
6411	38	19.9	1665	67	41	17	0
6412	32	18.0	1504	56	35	20	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6413	27	19.1	1605	60	35	19	0
6414	35	22.2	1906	65	38	18	0
6415	25	26.9	2309	78	44	22	0
6416	35	35.2	3020	97	62	31	0
6417	34	28.7	2464	81	46	18	7
6418	45	24.3	2090	69	40	21	0
6419	34	21.7	1889	61	31	16	0
6420	29	21.3	1857	62	32	12	0
6421	29	20.5	1784	64	28	13	0
6422	34	20.0	1739	58	26	16	0
6423	36	20.6	1813	58	30	10	0
6424	28	22.8	1967	61	36	20	0
6425	27	23.3	1998	62	34	13	10
6426	34	21.9	1912	62	26	10	8
6427	35	22.0	1931	66	30	11	0
6428	36	22.9	2017	64	31	12	0
6429	33	22.1	1948	60	25	16	0
6430	36	22.2	1967	55	26	17	0
6431	32	21.3	1878	59	25	15	0
6432	33	22.9	1978	60	28	16	8
6433	41	24.2	2154	66	26	14	0
6434	35	23.6	2091	65	28	14	0
6435	35	25.4	2262	71	30	12	0
6436	33	24.7	2193	62	31	14	0
6437	48	23.8	2114	60	29	15	0
6438	48	23.9	2106	65	32	15	0
6439	35	23.2	2044	67	29	13	0
6440	35	23.1	2046	57	31	14	0
6441	34	24.8	2207	67	31	12	0
6442	36	24.1	2146	62	29	13	0
6443	49	24.2	2157	63	29	13	0
6444	36	24.3	2160	71	29	10	0
6445	36	23.4	2070	67	29	12	0
6446	31	22.4	1968	68	29	12	0
6447	40	22.7	2003	68	29	11	0
6448	34	25.7	2233	76	30	13	9
6449	31	28.8	2511	83	40	12	7
6450	42	27.9	2451	85	38	13	0
6451	44	27.1	2383	78	37	15	0
6452	38	25.4	2235	77	33	13	0
6453	38	26.7	2304	76	36	16	8
6454	46	26.9	2357	81	38	13	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6455	28	26.9	2357	81	38	13	0
6456	46	28.0	2422	81	37	18	6
6457	46	27.5	2417	71	41	18	0
6458	44	26.2	2306	72	36	15	0
6459	27	26.7	2376	74	33	12	0
6460	32	27.1	2394	76	35	15	0
6461	41	25.1	2237	62	35	10	0
6462	39	22.8	2016	62	32	10	0
6463	43	23.0	2021	58	32	16	0
6464	55	21.6	1900	55	30	14	0
6465	41	22.0	1964	56	28	10	0
6466	36	24.0	2124	60	29	17	0
6467	41	25.2	2248	58	29	16	0
6468	46	23.7	2154	48	27	10	0
6469	54	22.5	2024	49	25	13	0
6470	25	21.6	1947	52	22	10	0
6471	48	22.1	1997	48	25	11	0
6472	53	22.5	2031	55	25	8	0
6473	45	22.2	1995	56	23	12	0
6474	52	20.6	1847	52	24	9	0
6475	51	21.7	1952	53	25	10	0
6476	7	22.8	2056	54	26	10	0
6477	43	22.8	2043	58	27	11	0
6478	32	21.4	1916	46	24	14	0
6479	36	21.8	1955	54	24	10	0
6480	13	21.8	1955	54	24	10	0
6481	34	21.7	1960	49	25	10	0
6482	33	22.6	2018	53	29	11	0
6483	43	22.5	1978	52	28	14	5
6484	28	18.6	1650	51	23	9	0
6485	30	17.5	1553	40	25	11	0
6486	75	18.5	1652	44	26	9	0
6487	45	18.4	1640	43	26	8	0
6488	41	19.9	1771	52	26	8	0
6489	40	19.7	1738	48	27	13	0
6490	33	20.1	1789	56	23	11	0
6491	31	21.2	1889	56	27	10	0
6492	41	20.3	1797	58	26	9	0
6493	42	20.1	1770	55	27	11	0
6494	37	17.6	1566	43	24	10	0
6495	33	20.8	1828	58	28	12	0
6496	40	20.8	1828	58	28	12	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6497	35	15.2	1337	36	22	11	0
6498	28	15.9	1408	44	19	10	0
6499	39	17.1	1498	50	23	10	0
6500	35	17.2	1498	50	23	9	3
6501	35	17.5	1538	46	24	9	3
6502	29	14.9	1328	39	18	8	0
6503	44	8.1	671	23	20	8	0
6504	42	16.9	1500	50	20	8	0
6505	37	16.9	1500	50	20	8	0
6506	16	231.2	21297	421	212	65	16
6507	74	137.4	12657	268	130	38	0
6508	62	110.2	10184	205	100	31	0
6509	32	40.5	3746	74	37	12	0
6510	35	29.9	2738	63	30	10	0
6511	47	26.8	2450	61	26	8	0
6512	32	30.3	2742	66	34	14	0
6513	33	31.2	2825	71	35	13	0
6514	34	21.1	1926	44	20	9	0
6515	33	17.5	1597	33	18	8	0
6516	28	17.0	1496	35	18	8	9
6517	30	14.1	1283	32	11	7	0
6518	25	12.8	1142	35	14	7	0
6519	23	12.8	1134	34	15	7	0
6520	19	13.7	1216	35	14	8	1
6521	36	13.3	1191	31	15	8	0
6522	24	14.5	1289	40	16	9	0
6523	29	14.3	1267	34	20	9	0
6524	25	15.2	1355	36	19	8	0
6525	35	17.6	1572	46	22	8	0
6526	30	20.1	1787	51	27	10	0
6527	26	24.9	2166	67	37	16	3
6528	22	25.9	2270	64	41	18	0
6529	24	23.9	2098	61	38	15	0
6530	29	24.0	2115	61	34	15	0
6531	33	22.3	1964	56	33	13	0
6532	33	19.4	1722	50	25	11	0
6533	48	16.8	1481	44	23	11	0
6534	47	17.3	1543	42	20	11	0
6535	36	17.7	1588	40	21	10	0
6536	36	17.9	1612	43	20	9	0
6537	32	18.1	1638	45	18	8	0
6538	31	16.1	1452	36	19	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6539	3	16.1	1452	36	19	8	0
6540	22	17.5	1580	41	17	8	1
6541	35	16.4	1490	33	18	8	0
6542	39	16.9	1521	41	18	7	0
6543	33	16.9	1538	35	18	6	0
6544	29	17.4	1568	38	21	9	0
6545	27	10.8	963	24	13	8	0
6546	33	12.7	1118	33	14	12	0
6547	27	10.8	955	25	13	10	0
6548	36	10.9	954	28	11	11	0
6549	35	11.1	959	27	17	11	0
6550	28	11.3	977	32	15	10	0
6551	26	11.8	1036	34	14	8	0
6552	32	11.4	1007	26	16	7	1
6553	35	11.7	1026	28	17	9	0
6554	26	11.0	960	28	16	8	1
6555	37	10.7	942	28	13	8	0
6556	33	9.3	806	23	15	7	0
6557	35	9.0	804	19	10	7	0
6558	37	9.5	829	23	14	8	0
6559	29	10.0	884	22	12	8	0
6560	47	8.9	784	18	13	7	0
6561	35	8.7	772	13	13	8	0
6562	37	8.7	772	20	11	7	0
6563	33	8.8	770	24	10	7	0
6564	24	8.8	776	21	11	8	0
6565	29	8.5	752	14	12	8	0
6566	45	8.4	742	22	7	8	0
6567	27	8.9	795	17	9	8	0
6568	34	9.9	891	22	9	7	0
6569	37	9.1	821	16	10	7	0
6570	40	9.3	835	21	9	7	0
6571	36	10.2	916	18	12	8	0
6572	39	13.7	1245	33	11	7	0
6573	34	13.2	1203	26	12	7	0
6574	26	13.4	1216	30	12	7	0
6575	44	13.5	1216	29	16	7	0
6576	37	12.3	1114	19	14	8	0
6577	28	11.8	1065	22	13	8	0
6578	29	11.5	1037	19	15	8	0
6579	30	10.1	902	26	10	7	0
6580	37	10.0	885	24	13	7	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6581	36	9.3	808	24	13	9	0
6582	30	8.8	770	23	12	8	0
6583	40	10.3	903	24	14	8	0
6584	38	9.3	820	22	11	7	0
6585	36	12.5	1117	26	17	7	0
6586	44	9.9	881	19	13	7	0
6587	46	10.4	918	20	15	8	0
6588	56	11.9	1055	35	12	6	0
6589	53	10.6	939	22	11	11	0
6590	48	12.7	1137	25	16	9	0
6591	48	13.6	1223	24	17	9	0
6592	28	9.5	835	19	14	8	0
6593	27	12.4	1103	29	17	8	0
6594	33	12.3	1110	25	14	8	0
6595	36	8.8	779	14	15	7	0
6596	31	9.6	849	24	10	7	0
6597	37	11.7	1039	30	13	8	0
6598	41	9.6	855	19	14	7	0
6599	32	9.1	763	30	15	10	0
6600	41	6.9	594	13	13	8	0
6601	12	7.1	594	13	13	12	0
6602	1	40.5	3536	96	71	26	0
6603	62	64.0	5788	129	80	28	0
6604	57	32.9	3028	61	33	11	0
6605	55	22.2	2027	42	23	11	0
6606	29	16.8	1515	33	20	10	0
6607	42	17.2	1541	40	20	10	0
6608	64	14.8	1315	31	19	11	0
6609	37	11.8	1052	20	15	11	0
6610	63	9.0	773	22	11	12	0
6611	44	12.4	1108	27	14	8	0
6612	35	12.8	1086	35	23	13	0
6613	28	13.5	1151	40	23	13	0
6614	26	13.5	1166	40	21	11	0
6615	15	13.8	1185	37	23	13	0
6616	16	13.8	1185	37	23	13	0
6617	20	15.2	1315	42	25	12	0
6618	21	12.6	1118	29	16	9	0
6619	34	12.3	1101	27	13	8	0
6620	29	12.1	1089	24	15	7	0
6621	21	13.1	1173	23	19	8	0
6622	32	17.5	1589	35	18	10	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6623	40	18.7	1721	33	17	9	0
6624	30	18.7	1721	33	17	9	0
6625	34	19.9	1837	37	18	7	0
6626	37	20.4	1872	33	19	10	0
6627	52	20.4	1846	37	20	14	0
6628	46	19.2	1726	39	22	13	0
6629	30	20.3	1860	40	16	10	0
6630	31	13.5	1198	33	16	9	0
6631	25	13.5	1198	33	16	9	0
6632	20	13.8	1226	36	15	8	0
6633	36	15.3	1353	34	20	11	0
6634	26	17.1	1510	38	22	14	0
6635	30	16.9	1510	38	21	11	0
6636	38	15.2	1370	30	19	8	0
6637	42	17.3	1534	43	24	10	0
6638	30	17.5	1563	41	20	10	0
6639	26	18.0	1586	47	19	15	0
6640	29	16.8	1493	37	18	14	0
6641	41	16.0	1419	32	20	13	0
6642	36	16.2	1457	36	17	9	0
6643	42	15.9	1417	32	22	10	0
6644	32	15.5	1388	38	17	9	0
6645	37	15.4	1367	37	17	11	0
6646	42	15.8	1428	31	15	10	0
6647	44	14.6	1315	28	18	9	0
6648	42	14.2	1271	28	19	10	0
6649	38	12.8	1163	30	11	7	0
6650	34	12.4	1110	26	16	7	0
6651	49	13.0	1170	30	14	7	0
6652	32	12.7	1149	26	13	7	0
6653	42	13.4	1199	30	14	9	0
6654	38	14.0	1260	33	14	8	0
6655	36	14.1	1257	37	14	8	0
6656	53	13.7	1257	37	12	0	0
6657	40	14.4	1289	34	15	9	0
6658	43	14.0	1273	25	14	9	0
6659	42	15.7	1416	31	19	8	0
6660	39	14.9	1340	30	18	9	0
6661	37	14.9	1340	30	17	9	0
6662	45	15.4	1385	33	18	8	0
6663	33	15.1	1351	40	16	7	0
6664	31	13.8	1256	39	16	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6665	38	15.3	1399	39	19	0	0
6666	38	13.4	1205	26	17	9	0
6667	36	15.8	1419	32	18	10	0
6668	35	17.1	1521	38	20	13	0
6669	30	15.3	1373	36	16	10	0
6670	40	14.6	1300	40	14	10	0
6671	30	13.6	1205	29	18	10	0
6672	20	11.8	1059	25	14	8	0
6673	31	12.5	1118	24	15	10	0
6674	39	12.2	1094	26	16	7	0
6675	25	11.0	1005	22	16	0	0
6676	30	12.2	1020	28	16	10	11
6677	30	11.4	937	31	16	9	11
6678	32	10.7	930	31	15	9	0
6679	28	10.7	968	27	16	0	0
6680	37	10.9	984	30	16	0	0
6681	32	11.5	1018	31	15	7	0
6682	27	11.5	1003	33	15	9	0
6683	31	10.4	918	23	15	8	0
6684	40	12.0	999	27	16	10	11
6685	33	12.4	1026	29	16	13	11
6686	33	12.1	1064	32	16	9	0
6687	29	13.1	1107	35	15	6	12
6688	28	11.0	997	30	14	0	0
6689	35	9.4	799	27	14	12	0
6690	33	13.7	1204	32	18	12	0
6691	32	14.3	1261	36	19	9	0
6692	44	12.0	1050	33	16	8	0
6693	28	14.8	1259	32	16	11	12
6694	32	14.2	1259	31	18	11	0
6695	44	14.6	1252	31	20	12	8
6696	39	962.3	88702	1795	930	274	11
6697	0	380.0	35368	624	313	95	13
6698	25	98.0	9094	167	80	22	8
6699	15	64.7	5971	110	53	21	8
6700	44	41.4	3756	89	47	16	0
6701	30	42.2	3822	91	49	16	0
6702	34	35.9	3237	81	43	15	0
6703	26	28.4	2554	62	30	11	5
6704	30	24.4	2179	53	28	12	5
6705	35	27.2	2412	55	32	14	10
6706	32	76.7	7003	131	72	29	14

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6707	3	35.6	2891	104	88	33	12
6708	9	41.9	3384	132	106	44	10
6709	10	43.0	3491	133	109	46	7
6710	12	35.6	2916	101	86	34	10
6711	11	23.1	1946	62	51	22	0
6712	18	22.8	1872	59	44	23	13
6713	16	21.8	1863	58	39	22	0
6714	22	20.7	1721	55	34	18	12
6715	21	29.2	2518	69	43	18	12
6716	27	34.8	2988	82	48	21	20
6717	28	35.2	3027	82	49	21	20
6718	29	34.4	3027	87	50	22	0
6719	26	35.2	2978	87	57	28	17
6720	5	31.3	2697	76	55	29	0
6721	87	31.3	2697	76	55	29	0
6722	98	32.1	2697	76	59	29	13
6723	142	31.1	2622	72	59	26	13
6724	140	31.4	2622	77	59	30	13
6725	146	30.4	2561	77	58	30	7
6726	143	29.4	2499	77	56	30	0
6727	98	31.4	2687	74	56	33	0
6728	64	38.2	3257	85	62	33	14
6729	75	38.2	3257	85	62	33	14
6730	87	73.6	6419	173	110	49	14
6731	103	48.8	4224	121	77	38	7
6732	280	24.0	2028	68	44	26	0
6733	130	24.0	2028	68	44	26	0
6734	117	24.0	2028	68	44	26	0
6735	142	24.3	2076	65	46	21	0
6736	127	24.3	2076	65	46	21	0
6737	151	24.3	2076	65	46	21	0
6738	150	35.1	3036	95	62	26	0
6739	200	45.9	3995	124	77	30	0
6740	128	45.9	3995	124	77	30	0
6741	157	75.4	6615	197	120	42	0
6742	155	104.8	9235	269	163	54	0
6743	195	189.9	16667	517	294	91	8
6744	145	189.9	16667	517	294	91	8
6745	141	189.9	16667	517	294	91	8
6746	181	189.9	16667	517	294	91	8
6747	212	264.4	23127	715	429	131	14
6748	164	280.7	24527	761	462	142	14

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6749	175	297.0	25926	806	495	152	14
6750	125	296.8	25926	806	495	152	9
6751	127	296.8	25926	806	495	152	9
6752	144	296.8	25926	806	495	152	9
6753	170	278.7	24420	750	459	144	0
6754	109	278.7	24420	750	459	144	0
6755	109	221.6	19515	579	346	113	0
6756	134	221.6	19515	579	346	113	0
6757	71	190.6	16783	494	299	98	0
6758	101	168.2	14760	435	272	93	0
6759	144	168.2	14760	435	272	93	0
6760	83	158.7	13897	419	260	90	0
6761	75	149.3	13034	403	247	86	0
6762	146	137.3	12033	352	226	79	0
6763	140	137.3	12033	352	226	79	0
6764	134	120.7	10636	299	192	66	0
6765	154	120.8	10636	304	192	66	0
6766	141	120.9	10636	308	192	66	0
6767	153	124.0	10885	321	197	72	0
6768	155	127.2	11134	334	202	77	0
6769	108	127.2	11134	334	202	77	0
6770	162	127.2	11134	334	202	77	0
6771	200	128.5	11267	334	202	77	0
6772	179	128.2	11267	327	198	77	0
6773	164	127.9	11267	320	193	76	0
6774	188	127.9	11267	320	193	76	0
6775	150	124.9	11103	290	179	68	0
6776	106	125.4	11103	290	179	68	9
6777	81	88.2	7861	193	125	49	0
6778	85	50.7	4456	114	82	36	0
6779	178	13.2	1050	35	38	22	0
6780	166	40.7	3529	94	73	34	0
6781	89	40.7	3529	94	73	34	0
6782	119	70.2	6243	156	100	42	0
6783	171	70.2	6243	156	100	42	0
6784	213	70.2	6243	156	100	42	0
6785	173	70.5	6272	157	100	42	0
6786	201	70.2	6243	156	100	42	0
6787	181	70.7	6301	158	100	37	0
6788	143	119.5	10518	308	186	64	0
6789	116	127.2	11134	334	202	77	0
6790	80	182.8	16288	422	246	87	13

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6791	86	123.1	10759	296	199	73	13
6792	111	109.9	9620	272	185	67	0
6793	92	127.3	11144	324	211	77	0
6794	134	145.0	12668	375	241	86	4
6795	148	162.6	14191	425	270	94	7
6796	112	162.6	14191	425	270	94	7
6797	109	198.7	17358	526	336	113	0
6798	106	235.1	20469	617	415	130	9
6799	104	316.8	27209	864	597	223	12
6800	4	131.5	11114	382	269	104	9
6801	56	98.6	8200	290	224	90	10
6802	6	64.8	5393	187	138	64	9
6803	17	60.0	4953	161	123	56	26
6804	14	40.8	3314	114	96	49	10
6805	28	46.2	3699	128	112	59	19
6806	28	45.6	3573	144	122	57	21
6807	13	51.4	4019	161	142	72	17
6808	12	52.2	4056	168	144	77	17
6809	22	45.4	3544	148	139	71	0
6810	26	45.7	3514	148	140	73	10
6811	19	53.8	4294	159	139	75	10
6812	17	59.1	4698	184	159	82	8
6813	26	57.3	4626	183	149	72	0
6814	27	61.6	4940	205	165	78	0
6815	30	63.5	5084	218	171	80	0
6816	30	73.6	5882	257	195	89	6
6817	30	83.7	6680	296	218	98	11
6818	37	81.0	6680	255	187	74	10
6819	62	81.2	6680	255	187	77	12
6820	165	81.4	6680	255	187	80	14
6821	110	72.5	5869	237	172	80	14
6822	148	67.2	5468	224	163	71	7
6823	141	61.9	5066	210	153	61	0
6824	135	61.9	5066	210	153	61	0
6825	148	59.0	4835	196	144	61	0
6826	58	56.6	4689	174	126	61	0
6827	79	56.6	4755	165	119	54	0
6828	74	53.5	4444	156	116	61	0
6829	52	50.3	4188	151	110	52	0
6830	68	51.0	4188	151	110	57	10
6831	84	48.2	3956	137	105	57	10
6832	62	46.0	3790	130	100	51	10

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6833	30	40.6	3283	110	94	52	13
6834	30	35.0	2770	98	94	51	9
6835	31	33.2	2553	98	91	54	17
6836	33	40.6	3217	112	104	58	15
6837	29	40.3	3217	112	104	58	9
6838	34	32.8	2570	94	85	55	10
6839	31	31.5	2463	94	81	46	15
6840	36	34.6	2747	91	81	50	17
6841	48	34.5	2736	95	83	50	15
6842	36	34.9	2791	91	84	55	9
6843	32	34.5	2791	92	86	55	0
6844	68	34.6	2787	93	86	56	0
6845	45	34.7	2713	96	86	56	16
6846	55	34.8	2732	101	87	52	16
6847	59	35.2	2767	101	89	50	16
6848	57	35.0	2767	103	90	51	11
6849	49	35.4	2827	106	96	53	0
6850	67	39.5	3130	113	100	57	14
6851	69	40.5	3221	113	103	57	14
6852	63	39.9	3221	108	103	53	6
6853	73	40.1	3287	109	99	53	0
6854	63	42.9	3524	118	104	54	0
6855	59	43.7	3524	122	104	60	9
6856	44	43.0	3484	122	96	60	9
6857	54	41.1	3394	120	93	49	0
6858	50	38.2	3172	112	85	43	0
6859	41	39.0	3173	107	85	51	10
6860	36	38.1	3091	111	85	48	10
6861	36	36.7	3033	107	85	42	0
6862	53	35.6	2936	97	78	49	0
6863	56	34.3	2829	89	78	48	0
6864	50	35.1	2784	92	79	53	18
6865	59	35.8	2835	103	79	53	18
6866	48	37.3	3009	103	79	52	14
6867	37	36.8	3009	92	77	52	10
6868	45	34.6	2820	92	75	44	10
6869	59	31.3	2584	81	72	43	0
6870	46	30.4	2499	82	69	42	0
6871	39	30.7	2499	82	69	42	7
6872	57	31.0	2499	82	69	42	13
6873	85	28.8	2345	77	62	37	9
6874	66	30.7	2520	74	59	43	10

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6875	65	31.7	2601	82	62	43	10
6876	64	34.8	2887	82	66	45	10
6877	54	35.6	2959	85	66	45	10
6878	64	35.4	2959	85	65	43	9
6879	39	34.5	2913	83	65	43	0
6880	58	34.5	2897	83	65	42	5
6881	58	34.5	2881	83	65	41	9
6882	44	39.9	3310	98	76	49	12
6883	42	40.0	3310	98	76	49	13
6884	72	35.3	2973	78	61	38	13
6885	38	21.4	1693	68	61	31	0
6886	40	106.3	9400	231	148	67	11
6887	53	48.1	4195	115	74	40	0
6888	35	42.5	3662	97	64	40	8
6889	38	46.7	4134	74	58	44	8
6890	42	46.4	4134	79	58	44	0
6891	27	32.4	2744	79	58	41	0
6892	35	48.2	4171	112	72	41	9
6893	30	41.1	3544	96	66	38	4
6894	28	34.0	2916	79	60	36	0
6895	25	16.8	1343	50	40	29	0
6896	10	16.7	1314	43	36	27	10
6897	15	7.9	615	25	20	17	0
6898	15	7.1	554	22	18	15	0
6899	19	9.3	691	27	23	16	10
6900	24	12.2	933	32	27	25	8
6901	20	11.4	910	29	24	24	0
6902	30	12.1	988	35	25	18	0
6903	21	9.6	777	22	20	20	0
6904	26	14.7	1198	36	27	14	13
6905	18	22.1	1883	49	33	19	10
6906	15	16.6	1351	42	28	22	10
6907	11	13.6	1167	29	22	17	0
6908	27	8.4	705	21	14	12	0
6909	44	8.4	705	22	15	12	0
6910	70	7.5	602	22	15	14	0
6911	87	7.1	580	16	13	14	0
6912	103	8.6	725	16	13	15	0
6913	145	8.6	725	16	13	15	0
6914	145	8.5	725	15	13	15	0
6915	120	15.0	1278	30	20	16	8
6916	98	19.7	1690	40	30	17	8

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6917	120	22.8	2012	43	30	17	4
6918	135	25.9	2335	46	30	17	0
6919	60	25.7	2335	46	30	14	0
6920	97	27.3	2484	48	32	13	0
6921	98	27.8	2484	48	32	13	10
6922	94	25.7	2295	46	31	10	10
6923	112	29.5	2567	53	34	24	16
6924	94	29.5	2567	53	34	24	16
6925	118	39.1	3455	76	51	18	15
6926	86	39.1	3455	76	51	18	15
6927	73	51.0	4508	96	56	32	21
6928	97	52.3	4584	96	67	32	24
6929	109	52.2	4584	93	67	32	24
6930	138	52.2	4584	93	67	32	24
6931	112	47.9	4216	96	63	22	21
6932	123	47.9	4216	96	63	22	21
6933	129	49.1	4385	89	65	20	15
6934	130	50.5	4508	95	65	20	15
6935	132	51.8	4630	101	65	20	15
6936	63	55.8	4942	101	70	30	21
6937	69	55.9	4942	106	70	30	21
6938	59	55.4	4941	106	69	29	12
6939	74	53.1	4781	96	63	26	8
6940	78	53.6	4781	96	63	34	13
6941	70	62.2	5517	122	75	34	20
6942	60	62.2	5517	122	75	34	20
6943	70	58.0	5232	105	74	34	0
6944	56	50.3	4499	95	61	28	9
6945	67	48.7	4337	89	60	29	12
6946	50	41.6	3673	80	51	29	12
6947	48	36.4	3233	80	49	25	0
6948	46	21.6	1909	48	30	16	0
6949	50	20.4	1776	44	28	15	6
6950	64	19.3	1644	40	27	14	13
6951	53	19.0	1621	41	28	11	13
6952	57	19.0	1634	41	28	17	7
6953	50	22.1	1917	44	33	17	7
6954	45	23.0	2008	44	35	15	8
6955	47	23.9	2008	44	35	20	21
6956	47	17.0	1511	31	26	11	0
6957	53	21.8	1882	50	33	15	7
6958	53	21.8	1882	50	33	15	8

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6959	48	16.7	1431	30	26	15	8
6960	81	16.9	1431	38	26	15	8
6961	99	16.3	1381	38	25	17	5
6962	34	16.5	1417	41	28	17	0
6963	48	13.8	1201	27	22	14	0
6964	43	13.9	1199	32	24	14	0
6965	48	17.2	1449	32	24	19	11
6966	48	15.3	1359	31	23	11	0
6967	59	15.1	1240	35	24	15	13
6968	56	15.0	1223	34	24	18	13
6969	62	15.3	1249	36	27	18	12
6970	52	18.1	1524	39	30	14	12
6971	58	26.1	2207	56	42	26	12
6972	42	25.5	2207	56	42	26	0
6973	44	31.1	2690	77	53	27	0
6974	45	15.4	1310	36	28	19	0
6975	63	13.7	1102	38	27	17	8
6976	33	13.0	1084	31	27	18	0
6977	57	14.0	1113	38	31	18	9
6978	51	13.5	1075	35	26	17	11
6979	54	13.5	1142	32	28	15	0
6980	35	14.1	1143	33	28	16	11
6981	25	85.5	4750	535	519	280	11
6982	25	85.3	4740	530	515	279	13
6983	25	84.0	4706	514	497	278	13
6984	20	82.7	4711	493	483	272	8
6985	25	77.6	4448	460	449	261	0
6986	16	66.7	4004	373	361	209	0
6987	44	65.5	4004	356	346	199	0
6988	71	63.3	3902	341	322	195	0
6989	95	63.3	3902	341	322	195	0
6990	136	60.0	3712	319	307	183	0
6991	99	60.0	3712	319	307	183	0
6992	113	56.4	3478	306	283	174	0
6993	156	56.6	3478	306	283	174	5
6994	181	56.9	3478	306	283	174	10
6995	155	55.3	3416	290	272	168	10
6996	144	53.8	3354	273	262	162	10
6997	139	51.7	3276	254	242	152	10
6998	210	49.6	3199	236	223	142	10
6999	179	49.6	3205	236	223	142	10
7000	118	46.7	3205	212	190	118	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7001	121	46.7	3205	212	190	118	0
7002	147	49.6	3470	217	191	121	0
7003	145	52.5	3736	222	192	124	0
7004	134	56.5	4069	226	198	125	6
7005	170	60.3	4402	230	203	126	11
7006	162	61.4	4494	236	203	127	11
7007	111	60.5	4494	236	191	127	0
7008	146	60.5	4494	236	191	127	0
7009	63	63.1	4793	239	183	122	0
7010	108	67.0	5110	251	190	124	5
7011	161	71.0	5427	263	197	127	10
7012	133	74.3	5692	263	197	143	10
7013	125	73.9	5692	258	196	143	5
7014	154	73.5	5692	254	194	143	0
7015	148	73.5	5692	254	194	143	0
7016	164	72.9	5628	258	196	139	0
7017	180	72.2	5563	263	198	135	0
7018	156	73.9	5622	268	205	145	7
7019	117	75.6	5682	274	212	155	14
7020	113	75.6	5682	274	212	155	14
7021	178	73.9	5567	259	206	151	16
7022	186	73.9	5567	259	206	151	16
7023	181	73.9	5567	259	206	151	16
7024	165	77.3	5760	268	231	171	11
7025	166	77.3	5760	268	231	171	11
7026	120	79.2	5818	280	248	186	10
7027	192	81.0	5877	293	265	201	8
7028	164	81.0	5877	293	265	201	8
7029	168	81.0	5877	293	265	201	8
7030	162	81.0	5877	293	265	201	8
7031	150	74.6	5265	275	259	202	12
7032	121	73.9	5162	281	279	206	0
7033	86	73.9	5162	281	279	206	0
7034	89	76.3	5189	310	297	222	9
7035	109	76.5	5189	320	297	222	9
7036	155	76.4	5189	315	297	222	9
7037	146	81.4	5666	314	289	244	0
7038	155	86.2	5921	390	290	263	0
7039	169	89.9	6176	395	300	282	0
7040	104	90.5	6176	400	315	282	0
7041	89	94.4	6253	420	390	294	0
7042	86	94.0	6253	425	375	294	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7043	90	78.5	5084	334	356	257	0
7044	85	74.0	4739	313	344	250	0
7045	116	74.6	4739	326	350	254	0
7046	112	69.5	4378	326	300	254	0
7047	107	69.4	4378	326	299	254	0
7048	124	69.4	4378	326	297	254	0
7049	106	59.4	3760	279	250	219	0
7050	121	80.4	5305	359	320	263	0
7051	125	80.2	5305	359	315	263	0
7052	93	80.2	5305	359	316	263	0
7053	109	78.2	5294	323	300	245	0
7054	145	88.3	6057	363	325	268	0
7055	144	99.8	6820	403	395	292	0
7056	163	95.8	6492	401	380	286	0
7057	125	95.7	6492	401	377	286	0
7058	100	73.7	4633	400	331	235	0
7059	117	73.6	4633	398	331	235	0
7060	127	73.6	4633	396	331	235	0
7061	135	66.6	4025	399	313	224	0
7062	125	62.7	3824	328	303	221	0
7063	126	59.9	3624	305	293	218	0
7064	89	76.4	4585	399	377	282	0
7065	109	80.4	4715	420	412	312	0
7066	128	84.5	5044	429	412	312	13
7067	96	74.5	4351	435	356	274	13
7068	86	61.7	3659	300	299	235	14
7069	98	51.9	2966	320	243	197	14
7070	100	75.5	5689	273	210	172	0
7071	75	178.5	14466	731	393	185	0
7072	84	36.2	2632	135	111	95	0
7073	97	36.2	2632	135	111	95	0
7074	63	36.2	2632	135	111	95	0
7075	105	21.0	1539	85	63	50	0
7076	120	21.0	1539	85	64	50	0
7077	139	21.0	1539	85	63	51	0
7078	128	21.1	1539	85	64	51	0
7079	132	23.3	1736	99	64	52	0
7080	76	23.3	1736	99	64	52	0
7081	94	23.0	1660	100	68	60	0
7082	106	40.4	2625	190	149	130	13
7083	99	40.6	2625	203	149	130	13
7084	107	41.4	2726	203	150	129	8

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7085	119	41.4	2726	203	150	129	8
7086	153	41.4	2726	205	146	131	8
7087	131	32.4	1899	163	146	131	10
7088	114	29.1	1591	163	146	130	7
7089	125	24.1	1591	103	99	70	7
7090	113	24.1	1663	103	95	65	0
7091	116	24.2	1663	106	95	65	0
7092	132	24.0	1663	106	90	64	0
7093	115	24.6	1721	102	90	65	0
7094	111	23.4	1630	100	91	60	0
7095	85	23.4	1630	100	85	64	0
7096	88	22.6	1543	101	85	64	0
7097	86	22.5	1543	101	84	62	0
7098	13	15.1	897	83	72	57	0
7099	52	14.8	865	87	71	56	0
7100	36	17.4	1136	84	73	55	0
7101	7	22.2	1498	103	83	55	9
7102	29	20.9	1377	92	86	56	10
7103	24	14.7	953	57	61	56	0
7104	19	22.1	1482	104	89	62	0
7105	21	20.5	1370	93	83	62	0
7106	18	19.6	1246	84	81	63	10
7107	18	18.3	1168	88	77	63	0
7108	26	18.5	1169	92	81	63	0
7109	31	19.1	1217	100	81	62	0
7110	37	23.8	1584	145	86	62	0
7111	6	22.5	1465	130	88	64	0
7112	149	22.6	1465	135	88	64	0
7113	210	20.9	1307	135	85	64	0
7114	167	20.7	1307	130	80	65	0
7115	137	20.3	1270	129	80	65	0
7116	146	19.8	1232	131	75	66	0
7117	143	20.1	1265	129	75	65	0
7118	135	20.4	1265	132	82	65	0
7119	123	20.2	1265	132	82	60	0
7120	144	20.4	1265	135	87	60	0
7121	142	22.4	1408	135	90	62	8
7122	112	24.0	1631	105	86	75	0
7123	99	24.0	1631	105	86	75	0
7124	130	25.1	1680	103	82	75	15
7125	121	24.7	1680	103	82	65	15
7126	93	18.4	1253	72	61	65	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7127	112	17.6	1253	72	61	45	0
7128	135	13.0	843	62	51	45	0
7129	140	12.3	843	49	51	35	0
7130	145	12.3	843	49	51	35	0
7131	87	11.7	816	46	41	35	0
7132	108	10.9	765	49	34	30	0
7133	117	10.9	765	49	34	30	0
7134	124	10.6	759	44	36	25	0
7135	100	10.5	753	40	38	25	0
7136	87	10.4	753	40	38	24	0
7137	56	11.1	798	47	39	24	0
7138	103	11.0	798	47	39	22	0
7139	75	18.7	1319	67	59	45	11
7140	65	18.7	1319	67	59	45	11
7141	72	23.5	1721	84	69	45	14
7142	72	19.9	1500	60	47	40	13
7143	21	19.9	1500	60	47	40	13
7144	21	17.8	1353	63	40	35	9
7145	58	33.7	2620	126	79	55	8
7146	67	33.7	2620	126	79	55	8
7147	83	31.6	2441	119	84	57	0
7148	119	31.6	2441	119	84	57	0
7149	108	20.9	1520	79	60	45	11
7150	183	20.9	1520	79	60	45	11
7151	133	20.9	1520	79	60	44	11
7152	167	16.2	1151	54	51	43	8
7153	169	16.2	1151	54	51	43	8
7154	180	18.7	1373	75	59	42	0
7155	155	18.7	1373	75	59	42	0
7156	122	27.0	2008	99	77	65	0
7157	119	17.6	1262	60	45	40	17
7158	114	17.6	1262	60	45	40	17
7159	132	17.4	1262	60	45	35	17
7160	122	14.6	1054	44	41	35	10
7161	123	14.5	1054	44	41	33	10
7162	107	14.5	1054	44	41	33	10
7163	104	14.3	1081	53	39	32	0
7164	155	352.7	30412	1118	515	270	0
7165	170	352.7	30412	1118	515	270	0
7166	120	131.6	9857	742	346	196	0
7167	80	116.1	9857	365	177	123	0
7168	159	45.5	3684	149	81	74	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7169	105	45.5	3684	149	81	74	6
7170	76	30.0	2345	102	61	55	9
7171	83	30.0	2345	102	61	55	9
7172	95	23.3	1818	79	48	40	10
7173	58	22.5	1754	75	49	41	7
7174	75	21.3	1663	60	44	41	11
7175	32	8.5	651	29	23	18	0
7176	42	8.9	635	29	28	18	9
7177	12	8.9	635	29	28	18	9
7178	36	7.7	565	33	26	15	0
7179	35	8.4	656	26	24	15	0
7180	20	10.7	804	33	26	18	10
7181	21	9.8	766	34	24	18	0
7182	26	11.6	914	43	26	20	0
7183	3	13.3	1061	52	27	20	0
7184	92	13.2	1060	51	28	18	0
7185	118	13.3	1060	50	29	17	2
7186	178	13.6	1059	50	29	15	10
7187	149	12.0	916	48	27	15	10
7188	74	11.6	908	50	27	16	2
7189	80	11.5	908	50	27	16	0
7190	71	11.7	930	50	26	16	0
7191	10	11.8	930	50	26	18	0
7192	60	13.4	1088	42	31	18	0
7193	45	14.6	1194	44	31	20	0
7194	110	13.2	1076	40	28	20	0
7195	51	13.2	1076	40	28	21	0
7196	148	12.4	994	39	27	21	0
7197	129	12.2	994	39	27	16	0
7198	127	11.5	923	37	26	18	0
7199	153	11.6	923	37	26	18	2
7200	133	11.7	923	38	26	18	5
7201	137	10.4	804	38	21	17	5
7202	121	10.3	804	39	21	17	3
7203	115	9.6	760	38	20	17	0
7204	116	9.6	760	38	20	17	0
7205	129	10.9	877	44	25	13	0
7206	128	10.9	877	44	25	13	0
7207	114	11.5	920	42	25	15	2
7208	119	11.5	920	42	25	15	3
7209	63	12.3	1023	43	24	7	5
7210	73	13.6	1149	43	27	7	4

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7211	44	14.8	1274	44	25	7	2
7212	78	16.0	1401	44	28	5	1
7213	97	16.1	1428	43	25	6	0
7214	68	15.2	1328	43	27	6	0
7215	97	15.2	1328	42	27	6	0
7216	71	13.7	1187	45	24	4	0
7217	65	14.7	1287	45	22	5	1
7218	110	14.8	1287	45	22	5	4
7219	101	14.9	1297	46	26	5	1
7220	131	15.0	1297	46	26	5	2
7221	149	14.9	1297	45	26	5	0
7222	73	16.2	1431	45	27	5	0
7223	127	15.9	1373	45	27	12	0
7224	177	16.4	1373	52	27	12	6
7225	86	16.1	1373	55	27	12	0
7226	190	16.1	1373	55	27	12	0
7227	119	15.1	1307	55	25	4	0
7228	134	14.6	1242	56	25	8	0
7229	118	14.6	1242	56	25	8	0
7230	132	14.4	1242	54	20	8	0
7231	75	16.1	1382	53	23	7	4
7232	125	15.9	1382	54	23	7	0
7233	129	15.8	1367	54	22	10	0
7234	138	15.8	1367	55	22	10	0
7235	109	15.1	1328	55	21	3	0
7236	102	15.2	1328	57	21	3	0
7237	111	15.4	1335	57	21	7	0
7238	104	15.3	1335	52	20	7	0
7239	129	16.3	1431	52	20	8	0
7240	114	16.8	1499	53	19	4	0
7241	113	16.7	1499	42	20	4	2
7242	139	16.6	1499	32	21	5	2
7243	145	13.9	1269	31	12	5	0
7244	138	13.8	1269	30	11	5	0
7245	151	13.5	1236	25	10	6	2
7246	173	13.3	1204	20	17	7	2
7247	164	13.4	1204	25	18	7	0
7248	220	13.5	1204	28	19	7	0
7249	137	15.1	1367	28	19	8	0
7250	153	15.1	1367	28	19	8	0
7251	100	17.9	1623	42	19	6	0
7252	120	17.9	1623	42	19	7	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7253	154	18.0	1623	42	19	8	0
7254	137	17.0	1530	40	18	8	0
7255	200	15.9	1438	37	16	8	0
7256	105	22.1	2011	51	23	7	0
7257	87	5.6	486	10	10	5	0
7258	26	13.4	1185	38	17	8	0
7259	61	117.9	10430	394	144	36	0
7260	236	104.3	9191	345	127	32	8
7261	132	104.3	9191	345	127	32	8
7262	157	103.9	9191	345	127	32	0
7263	77	47.0	4189	153	59	8	0
7264	59	25.3	2018	153	59	7	0
7265	46	15.0	1310	45	22	9	0
7266	49	14.1	1248	44	17	5	0
7267	119	15.3	1358	36	21	10	0
7268	127	15.3	1358	36	21	10	0
7269	142	15.3	1358	36	21	10	0
7270	105	15.0	1323	35	21	6	3
7271	108	14.6	1302	35	21	6	0
7272	122	14.4	1282	39	20	5	0
7273	79	14.4	1282	39	20	5	0
7274	145	16.7	1459	45	22	14	0
7275	98	16.8	1459	45	25	14	0
7276	109	25.1	2257	65	31	8	0
7277	129	25.3	2257	70	31	8	2
7278	108	25.3	2257	70	31	8	2
7279	123	22.1	1939	73	31	9	0
7280	132	18.4	1584	73	30	6	0
7281	74	18.2	1584	72	22	6	0
7282	103	16.8	1470	72	18	4	0
7283	126	16.7	1470	71	15	4	0
7284	76	17.1	1506	70	15	5	0
7285	63	17.0	1493	68	13	7	0
7286	66	16.3	1465	47	15	7	0
7287	68	16.6	1484	58	13	5	0
7288	77	16.6	1484	58	13	5	0
7289	81	16.5	1477	44	16	8	0
7290	58	16.1	1425	54	16	6	0
7291	104	16.1	1425	54	16	6	0
7292	77	15.7	1405	49	17	4	0
7293	90	15.5	1394	44	16	5	0
7294	95	15.6	1394	44	16	5	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7295	37	17.6	1558	64	16	4	2
7296	58	17.6	1558	64	16	4	2
7297	65	18.8	1674	62	19	6	0
7298	52	19.0	1698	62	20	5	0
7299	45	17.8	1567	64	19	6	0
7300	46	17.0	1500	64	16	6	0
7301	79	17.0	1500	64	16	6	0
7302	107	16.6	1464	60	18	5	0
7303	161	16.7	1464	60	18	5	3
7304	122	16.1	1394	60	16	7	3
7305	84	15.9	1394	60	16	7	0
7306	88	15.6	1376	60	16	5	0
7307	115	16.1	1419	61	16	6	0
7308	99	16.1	1419	61	16	6	0
7309	90	18.1	1608	61	15	8	0
7310	74	18.1	1608	61	15	8	0
7311	105	21.3	1913	70	16	5	2
7312	130	21.2	1913	70	16	5	0
7313	140	21.3	1913	70	18	5	0
7314	135	23.1	2095	71	17	5	0
7315	58	25.2	2260	73	22	8	3
7316	11	25.2	2260	73	22	8	3
7317	77	28.3	2563	83	24	8	0
7318	34	31.6	2866	93	25	8	0
7319	11	31.6	2866	93	25	8	0
7320	21	31.6	2866	93	25	8	0
7321	197	30.6	2764	89	25	4	5
7322	178	30.3	2764	89	25	4	0
7323	153	28.5	2576	90	23	6	0
7324	144	26.6	2388	90	21	8	0
7325	129	26.7	2388	91	21	8	0
7326	130	26.7	2388	92	21	8	0
7327	127	26.6	2387	92	22	6	0
7328	143	26.6	2387	90	22	6	0
7329	139	26.6	2387	88	23	6	0
7330	146	25.8	2308	88	23	7	0
7331	119	25.1	2228	89	24	8	0
7332	125	25.1	2228	89	25	8	0
7333	127	24.1	2134	84	26	8	0
7334	153	23.3	2040	80	28	7	3
7335	167	24.1	2125	86	28	8	0
7336	119	25.1	2210	92	29	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7337	133	25.1	2210	92	29	8	0
7338	134	25.1	2210	92	29	8	0
7339	126	11.1	960	37	12	7	3
7340	109	11.1	950	46	16	5	0
7341	100	22.1	1933	84	27	8	0
7342	114	22.2	1933	85	28	8	0
7343	110	22.2	1934	85	28	8	0
7344	117	22.2	1934	86	27	8	0
7345	98	22.3	1936	86	27	5	4
7346	95	22.1	1936	87	26	5	0
7347	130	22.0	1930	87	26	5	0
7348	85	21.9	1930	85	24	5	0
7349	119	21.9	1925	83	25	5	0
7350	113	21.1	1824	83	28	8	0
7351	88	22.3	1988	84	26	0	0
7352	77	22.8	1988	84	17	13	5
7353	46	50.2	4434	174	59	10	4
7354	18	17.5	1483	65	25	10	4
7355	175	9.3	780	32	14	12	0
7356	61	6.4	517	19	11	14	0
7357	57	5.3	451	17	7	7	0
7358	51	4.8	387	12	9	10	0
7359	87	4.8	387	12	9	10	0
7360	111	4.4	368	19	6	3	0
7361	121	4.4	368	19	6	3	0
7362	97	5.0	428	16	7	4	0
7363	77	5.0	428	16	7	4	0
7364	69	6.0	508	16	8	4	3
7365	20	5.9	471	26	12	5	3
7366	21	5.1	413	17	12	5	2
7367	197	4.3	324	24	11	5	0
7368	3	4.3	324	24	11	5	0
7369	156	3.8	278	18	10	8	0
7370	127	3.3	239	16	10	6	0
7371	108	3.1	236	10	10	6	0
7372	62	2.6	175	17	8	6	0
7373	44	2.5	175	17	8	5	0
7374	8	2.9	212	16	8	5	0
7375	53	3.1	210	15	12	5	2
7376	63	3.3	264	15	8	4	0
7377	116	5.4	443	18	12	6	0
7378	107	6.6	548	25	11	6	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7379	59	6.9	548	28	12	8	4
7380	83	7.0	548	30	14	7	4
7381	103	7.9	647	30	14	7	2
7382	130	9.4	821	27	11	7	0
7383	88	10.0	859	25	14	6	4
7384	84	10.0	859	25	14	6	4
7385	112	9.9	859	29	12	5	3
7386	99	9.7	859	29	12	5	0
7387	176	10.7	939	26	10	5	5
7388	108	10.7	939	26	10	5	5
7389	71	11.0	977	28	16	5	0
7390	82	11.4	997	36	16	6	0
7391	103	11.4	997	36	16	6	0
7392	114	11.5	997	36	16	8	0
7393	86	11.5	999	33	17	8	0
7394	64	11.5	999	33	17	8	0
7395	84	11.7	1043	27	18	5	0
7396	71	12.2	1056	40	18	7	0
7397	109	11.8	1015	39	20	6	0
7398	38	11.8	1015	39	20	6	0
7399	76	11.2	945	37	16	7	5
7400	63	3.8	281	18	12	6	0
7401	46	3.1	230	22	8	4	0
7402	70	2.5	143	26	14	4	0
7403	115	2.5	143	26	14	4	0
7404	76	2.7	114	27	19	4	5
7405	79	2.8	137	23	17	11	0
7406	74	3.2	182	31	15	8	0
7407	56	4.2	283	23	18	10	0
7408	73	4.2	283	23	18	10	0
7409	127	5.0	382	26	7	5	4
7410	76	5.0	382	26	7	5	5
7411	74	5.1	409	17	15	6	0
7412	75	5.8	442	18	15	10	3
7413	96	5.0	411	18	7	7	0
7414	49	4.7	380	17	9	6	0
7415	58	4.7	414	12	6	4	0
7416	88	5.0	433	17	6	4	0
7417	64	5.0	433	17	6	4	0
7418	101	5.0	433	17	7	3	0
7419	117	5.6	474	21	7	3	2
7420	106	5.8	474	21	11	5	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7421	115	6.0	544	11	6	3	0
7422	109	6.0	544	11	6	3	0
7423	106	6.1	522	22	7	3	2
7424	70	6.1	549	10	6	3	3
7425	57	7.0	585	25	11	5	2
7426	63	7.4	622	21	14	7	2
7427	56	7.3	622	21	14	7	0
7428	53	7.1	606	12	13	6	3
7429	95	6.6	550	16	13	6	2
7430	84	6.6	550	16	14	6	2
7431	73	11.3	970	40	15	8	0
7432	86	12.3	1104	28	12	9	0
7433	91	12.3	1104	28	12	9	0
7434	60	7.5	657	15	12	7	0
7435	55	5.5	435	24	13	7	0
7436	96	5.2	429	20	13	4	0
7437	33	5.4	443	22	10	5	0
7438	77	5.3	443	21	10	4	0
7439	54	5.5	446	20	12	6	0
7440	47	5.5	449	21	12	6	0
7441	81	5.7	432	22	13	7	5
7442	48	5.0	400	16	14	7	0
7443	96	5.1	404	19	14	7	0
7444	97	5.1	406	19	10	9	0
7445	99	5.5	406	40	10	9	0
7446	96	7.4	571	46	14	9	0
7447	86	18.4	1660	50	17	8	0
7448	63	13.9	1224	45	16	8	0
7449	177	13.9	1224	45	15	8	0
7450	88	13.4	1185	41	15	7	0
7451	53	16.8	1499	46	15	11	0
7452	54	16.6	1499	46	15	7	0
7453	66	16.4	1454	56	17	6	0
7454	90	15.5	1376	58	13	5	0
7455	170	15.5	1376	58	13	5	0
7456	174	15.5	1376	58	13	5	0
7457	49	7.6	542	68	19	6	0
7458	59	5.4	376	48	15	6	0
7459	31	3.8	236	38	14	7	0
7460	23	3.9	236	44	14	7	0
7461	31	3.6	226	44	9	4	0
7462	3	4.4	291	23	15	10	3

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7463	20	4.2	277	30	14	10	0
7464	13	4.1	305	31	14	0	0
7465	56	5.3	376	40	15	7	0
7466	109	5.2	374	30	17	9	0
7467	77	5.2	374	30	17	9	0
7468	70	4.8	341	33	14	8	0
7469	89	4.8	341	33	14	8	0
7470	90	4.8	338	40	15	4	0
7471	53	4.8	351	26	12	9	0
7472	66	5.1	365	40	11	8	0
7473	73	5.2	383	28	12	7	3
7474	75	5.2	383	28	12	7	4
7475	104	5.4	410	27	12	9	0
7476	65	5.8	431	39	12	9	0
7477	35	6.3	501	26	10	11	0
7478	53	6.3	492	32	10	12	0
7479	64	6.2	492	32	10	9	0
7480	67	6.5	497	39	13	9	0
7481	65	6.5	500	36	12	11	0
7482	76	6.4	500	36	10	9	0
7483	66	8.3	613	41	14	10	10
7484	40	9.3	713	41	14	10	10
7485	74	8.6	713	34	14	8	0
7486	79	8.4	706	33	13	8	0
7487	110	8.4	706	33	13	8	0
7488	109	7.8	642	37	12	8	0
RIO BRAVO SHALY							
7489	60	7.4	612	39	10	5	0
7490	96	7.4	612	39	10	5	0
7491	66	6.9	579	32	10	5	0
7492	62	6.9	571	33	11	5	0
7493	86	7.0	571	33	12	6	0
7494	94	6.9	589	22	12	6	0
7495	94	7.0	589	23	8	10	0
7496	104	7.4	569	42	17	8	0
7497	72	7.4	569	42	17	8	0
7498	84	7.2	614	26	11	6	0
7499	104	7.2	614	26	11	6	0
7500	87	9.5	802	33	12	12	0
7501	65	9.5	802	33	12	12	0
7502	54	12.2	1064	46	13	6	0
7503	76	12.2	1064	46	13	6	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7504	70	10.6	903	42	12	10	0
7505	71	8.5	703	36	12	10	0
7506	71	8.5	703	36	13	10	0
7507	132	7.3	558	34	13	12	3
7508	41	6.4	530	22	12	8	0
7509	29	6.7	540	28	13	8	0
7510	62	6.6	540	28	14	6	0
7511	73	6.7	526	33	15	7	0
7512	77	5.9	473	21	15	7	0
7513	54	11.8	979	54	24	6	0
7514	55	12.9	1006	85	30	6	0
7515	30	5.8	458	37	9	5	0
7516	31	5.5	454	19	11	5	0
7517	73	5.6	436	28	14	6	0
7518	71	5.8	418	38	16	10	0
7519	58	5.7	413	38	16	8	0
7520	47	5.6	415	32	14	9	0
7521	28	5.5	415	32	14	8	0
7522	21	4.9	374	24	11	8	0
7523	48	5.6	444	31	11	6	0
7524	105	9.4	785	49	11	6	0
7525	94	9.4	785	49	12	5	0
7526	65	9.4	785	49	11	5	1
7527	93	6.0	488	26	12	5	0
7528	77	6.0	479	27	13	6	0
7529	48	11.8	1029	42	13	6	0
7530	49	11.0	936	47	12	6	2
7531	41	11.9	1029	49	13	5	0
7532	53	8.6	713	34	14	8	0
7533	84	8.4	706	33	13	8	0
7534	53	8.4	706	33	13	8	0
7535	67	7.8	642	37	12	8	0
7536	46	7.4	612	39	10	5	0
7537	40	7.4	612	39	10	5	0
7538	26	6.9	579	32	10	5	0
7539	89	6.9	571	33	11	5	0
7540	71	7.0	571	33	12	6	0
7541	77	6.9	589	22	12	6	0
7542	108	14.4	1257	48	19	7	0
7543	69	7.2	614	26	11	6	0
7544	123	9.4	802	33	12	10	0
7545	73	9.5	802	33	13	11	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7546	77	9.8	820	35	14	12	0
7547	42	10.3	850	37	17	13	0
7548	48	10.5	860	38	18	14	0
7549	48	10.6	865	39	20	15	0
7550	61	43.8	3656	242	66	10	0
7551	142	43.8	3656	242	66	10	0
7552	135	44.1	3656	255	68	10	0
7553	93	41.9	3449	255	68	6	0
7554	108	47.6	3852	309	89	6	0
7555	148	47.6	3852	309	89	6	0
7556	124	45.3	3686	285	84	6	0
7557	81	45.3	3686	285	84	6	0
7558	113	36.0	2980	204	60	7	0
7559	83	30.3	2560	150	48	6	0
7560	96	30.3	2560	150	48	6	0
7561	54	27.3	2323	129	41	6	0
7562	62	26.5	2264	120	41	5	0
7563	61	22.4	1943	104	19	7	0
7564	62	22.8	1959	99	32	7	0
7565	44	23.4	2006	102	35	5	0
7566	46	23.0	1976	101	32	6	0
7567	58	23.0	1976	101	34	6	0
7568	106	22.4	1921	100	34	5	0
7569	61	22.5	1921	99	34	7	0
7570	42	22.2	1884	102	35	7	0
7571	45	21.8	1859	89	37	7	0
7572	34	21.7	1859	88	37	6	0
7573	40	19.6	1646	91	34	7	0
7574	76	19.6	1646	91	34	7	0
7575	98	18.5	1543	84	37	7	0
7576	88	16.9	1403	82	32	6	0
7577	60	17.4	1460	76	36	6	0
7578	76	18.3	1519	85	36	9	0
7579	79	18.2	1519	85	33	9	0
7580	94	19.0	1590	85	33	9	0
7581	119	19.0	1643	85	18	7	0
7582	53	19.8	1720	81	26	5	0
7583	73	20.7	1796	77	33	4	0
7584	82	21.9	1889	82	35	8	0
7585	97	22.0	1898	84	35	8	0
7586	66	22.0	1898	84	34	8	0
7587	97	22.5	1928	92	36	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7588	93	22.9	1956	99	37	7	0
7589	84	23.0	1956	101	38	6	0
7590	69	22.3	1889	101	38	6	0
7591	74	22.3	1867	110	42	4	0
7592	104	23.4	1924	121	46	8	0
7593	91	23.4	1924	121	46	8	0
7594	102	24.9	2040	137	49	8	0
7595	80	26.3	2114	165	56	4	0
7596	64	29.8	2351	205	62	8	0
7597	70	29.8	2351	205	62	8	0
7598	111	32.5	2529	239	74	5	0
7599	71	34.9	2682	277	78	4	0
7600	84	34.9	2682	277	78	5	0
7601	74	37.0	2806	303	88	7	0
7602	51	37.6	2840	307	95	6	0
7603	27	38.1	2881	313	94	6	0
7604	27	38.0	2881	304	94	6	0
7605	58	35.3	2688	283	84	6	0
7606	89	35.3	2688	283	84	6	0
7607	83	32.7	2498	252	79	7	0
7608	66	32.8	2498	252	82	7	0
7609	74	32.3	2475	243	82	6	0
7610	65	32.0	2516	222	76	4	0
7611	79	32.0	2516	222	76	4	0
7612	129	31.1	2470	208	68	4	0
7613	92	31.0	2481	200	63	8	0
7614	71	31.0	2481	200	63	8	0
7615	92	30.4	2481	174	63	6	0
7616	98	30.4	2481	174	63	6	0
7617	95	30.0	2478	168	58	4	0
7618	91	30.7	2530	166	60	6	0
7619	95	30.7	2530	166	60	7	0
7620	72	28.4	2357	149	52	7	0
7621	96	28.4	2357	151	52	7	0
7622	112	27.2	2320	151	26	5	0
7623	108	27.1	2322	146	26	5	0
7624	105	27.0	2323	141	25	5	0
7625	114	29.0	2440	141	49	8	0
7626	67	29.0	2440	140	49	8	0
7627	100	29.0	2440	140	49	8	0
7628	74	28.4	2426	122	44	9	0
7629	69	27.5	2360	112	44	9	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7630	91	26.1	2261	104	37	7	0
7631	98	26.2	2274	104	37	7	0
7632	96	26.0	2274	96	35	6	0
7633	124	30.7	2686	117	41	6	0
7634	82	25.7	2084	139	53	12	0
7635	31	31.8	2685	140	55	13	0
7636	35	48.9	4394	141	56	12	0
7637	36	88.4	8113	258	65	5	0
7638	45	439.5	39843	1633	274	5	0
7639	79	842.0	76225	3208	513	4	0
7640	80	1244.4	112608	4783	752	4	0
7641	58	1281.5	115761	4988	798	5	0
7642	35	612.8	55576	2260	384	7	0
7643	31	202.4	18382	703	142	7	0
7644	58	60.7	5368	243	63	8	0
7645	58	41.4	3606	174	50	8	0
7646	44	30.0	2504	149	54	8	0
7647	45	29.8	2494	149	54	6	0
7648	34	18.3	1516	89	37	5	0
7649	48	18.0	1487	89	37	6	0
7650	43	17.2	1433	82	34	5	0
7651	44	17.8	1486	82	34	7	1
7652	41	16.3	1371	69	31	7	1
7653	40	15.0	1246	69	30	7	0
7654	36	13.2	1116	56	23	5	0
7655	57	11.4	962	56	14	6	0
7656	38	12.6	1046	55	27	6	0
7657	46	13.3	1126	49	25	7	0
7658	64	13.3	1126	50	25	7	0
7659	91	13.6	1149	57	23	6	0
7660	19	26.3	2340	68	31	9	5
7661	73	17.8	1526	68	31	6	0
7662	79	15.6	1362	66	14	6	0
7663	58	15.1	1283	61	28	6	0
7664	42	16.5	1367	79	30	10	0
7665	55	18.1	1458	107	34	10	0
7666	42	21.9	1789	130	36	8	0
7667	42	25.6	2120	154	38	5	0
7668	44	25.7	2120	155	38	6	0

FLUORESCENCE DATA RECORD

WELL: LO6-31D

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.
2660 - 2690	TALARA		X					PL YEL		X				X			X			X			YELSH WH	MKY WH	NIL
2690 - 2720	TALARA						10	PL YEL		X				X			X			X			YELSH WH	MKY WH	NIL
3080 - 3110	TALARA		X					PL YEL	X					X			X			X			YELSH WH	NIL	NIL
5090 - 5100	RIO BRAVO						5	PL YEL	X					X			X			X			YELSH WH	NIL	NIL
5100 - 5110	RIO BRAVO						5	PL YEL	X					X			X			X			YELSH WH	NIL	NIL
5110 - 5120	RIO BRAVO						5	PL YEL	X					X			X			X			YELSH WH	NIL	NIL
5120 - 5130	RIO BRAVO						5	PL YEL	X					X			X			X			YELSH WH	NIL	NIL
5130 - 5140	RIO BRAVO						5	PL YEL	X					X			X			X			YELSH WH	NIL	NIL
5140 - 5150	RIO BRAVO						5	PL YEL	X					X			X			X			YELSH WH	NIL	NIL
5150 - 5160	RIO BRAVO		X					PL YEL	X					X			X			X			YELSH WH	NIL	NIL
5160 - 5170	RIO BRAVO		X					PL YEL	X					X			X			X			YELSH WH	NIL	NIL
5170 - 5180	RIO BRAVO		X					PL YEL	X					X			X			X			YELSH WH	NIL	NIL
5450 - 5460	RIO BRAVO		X					PL YELSH						X			X			X			YELSH WH	MKY WH	NIL
5460 - 5470	RIO BRAVO		X					PL YELSH						X			X			X			YELSH WH	MKY WH	NIL
5470 - 5480	RIO BRAVO						15	PL YELSH						X			X			X			YELSH WH	MKY WH	NIL
5480 - 5490	RIO BRAVO						10	PL YELSH						X			X			X			YELSH WH	MKY WH	NIL
5490 - 5500	RIO BRAVO						10	PL YELSH						X			X			X			YELSH WH	MKY WH	NIL
5500 - 5510	RIO BRAVO						10	PL YELSH						X			X			X			YELSH WH	MKY WH	NIL
5510 - 5520	RIO BRAVO						10	PL YELSH						X			X			X			YELSH WH	MKY WH	NIL
5520 - 5530	RIO BRAVO						10	PL YELSH						X			X			X			YELSH WH	MKY WH	NIL



FLUORESCENCE DATA RECORD

WELL: LO6-31D



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.
5530 - 5540	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
5540 - 5550	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
5570 - 5580	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	NIL	NIL
5580 - 5590	RIO BRAVO						5	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
5590 - 5600	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
5600 - 5610	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
5610 - 5620	RIO BRAVO						5	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
5620 - 5630	RIO BRAVO						5	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
5630 - 5640	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
5640 - 5650	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6150 - 6160	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6160 - 6170	RIO BRAVO						10	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6170 - 6180	RIO BRAVO						5	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6180 - 6190	RIO BRAVO						10	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6190 - 6200	RIO BRAVO						10	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6200 - 6210	RIO BRAVO						10	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6210 - 6120	RIO BRAVO						10	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6220 - 6230	RIO BRAVO						5	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6230 - 6240	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6240 - 6250	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL

FLUORESCENCE DATA RECORD

WELL: LO6-31D

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.
6250 - 6260	RIO BRAVO						10	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6260 - 6270	RIO BRAVO						20	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6270 - 6280	RIO BRAVO						25	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6280 - 6290	RIO BRAVO						40	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6290 - 6300	RIO BRAVO						30	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6300 - 6310	RIO BRAVO						30	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6310 - 6320	RIO BRAVO						10	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6320 - 6330	RIO BRAVO						10	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6330 - 6340	RIO BRAVO						10	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6340 - 6350	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6350 - 6360	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6500 - 6510	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6510 - 6520	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6520 - 6530	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6530 - 6540	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6540 - 6550	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6550 - 6560	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6560 - 6570	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6730 - 6740	RIO BRAVO						5	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6740 - 6750	RIO BRAVO						30	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL

FLUORESCENCE DATA RECORD

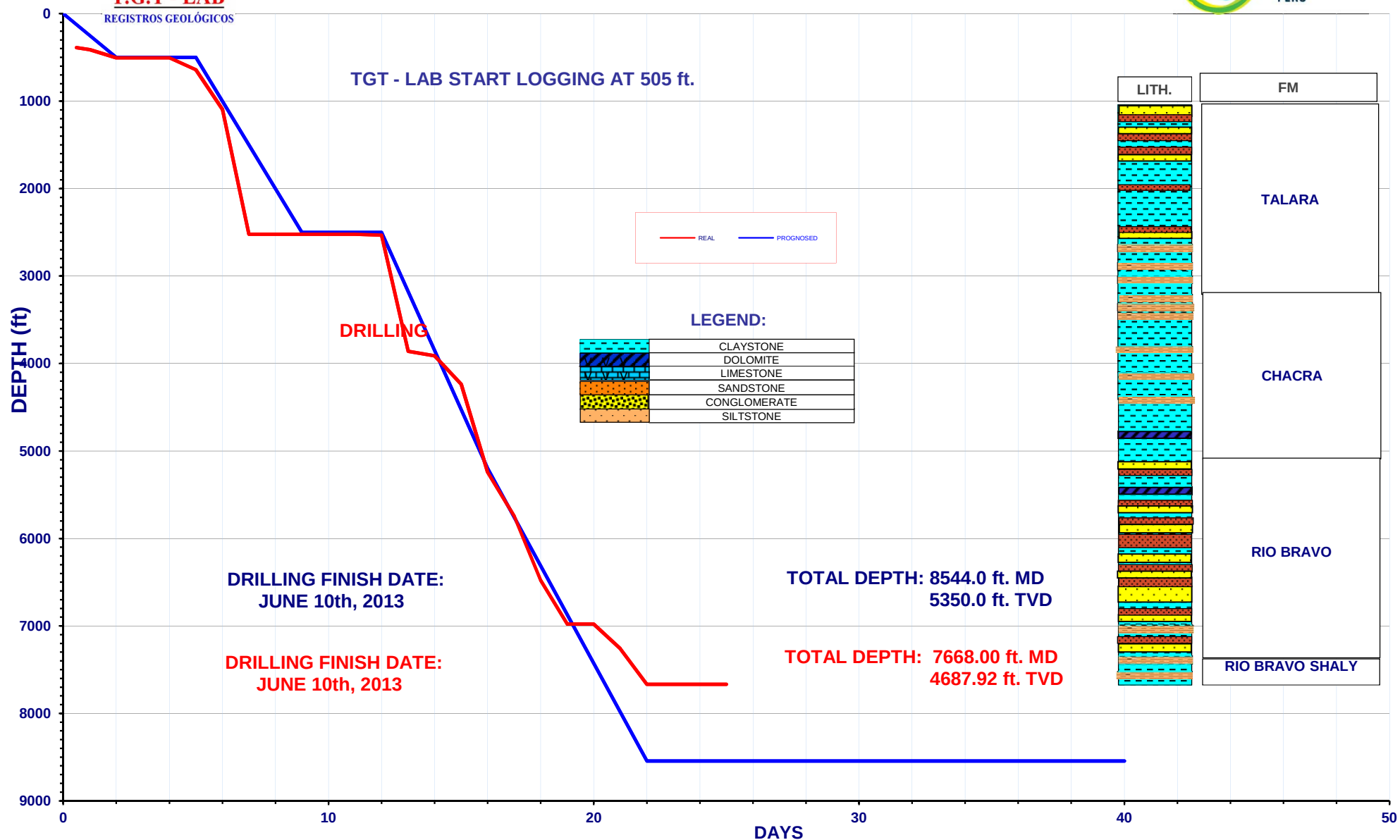
WELL: LO6-31D

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.
6750 - 6760	RIO BRAVO						25	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6760 - 6770	RIO BRAVO						20	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6770 - 6780	RIO BRAVO						20	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6780 - 6790	RIO BRAVO						15	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6790 - 6800	RIO BRAVO						15	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6800 - 6810	RIO BRAVO						20	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6810 - 6820	RIO BRAVO						15	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6820 - 6830	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6830 - 6840	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6840 - 6850	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6900 - 6910	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6910 - 6920	RIO BRAVO						20	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6920 - 6930	RIO BRAVO						30	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6930 - 6940	RIO BRAVO						40	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6940 - 6950	RIO BRAVO						40	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6950 - 6960	RIO BRAVO						20	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6960 - 6970	RIO BRAVO						15	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
6970 - 6980	RIO BRAVO						10	PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
7060 - 7070	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL
7070 - 7080	RIO BRAVO		X					PL YELSH		X				X			X			X			YELSH WH	MKY WH	NIL

[illegible]



DRILLING PROGRESS CURVE WELL : LO6-31D





BIT RECORD



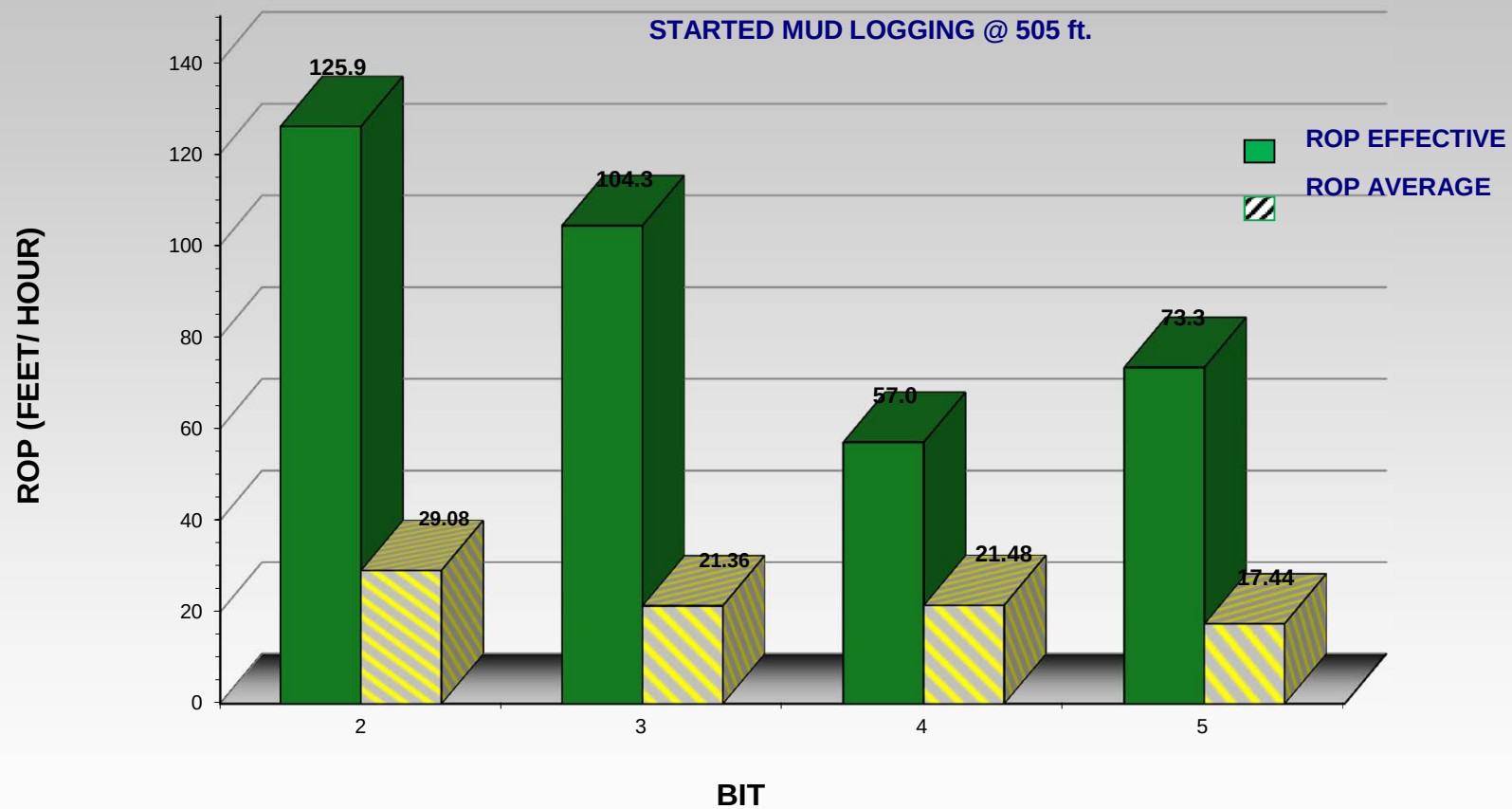
WELL: LO6-31D

* STARTED MUD LOGGING @ 505 ft.

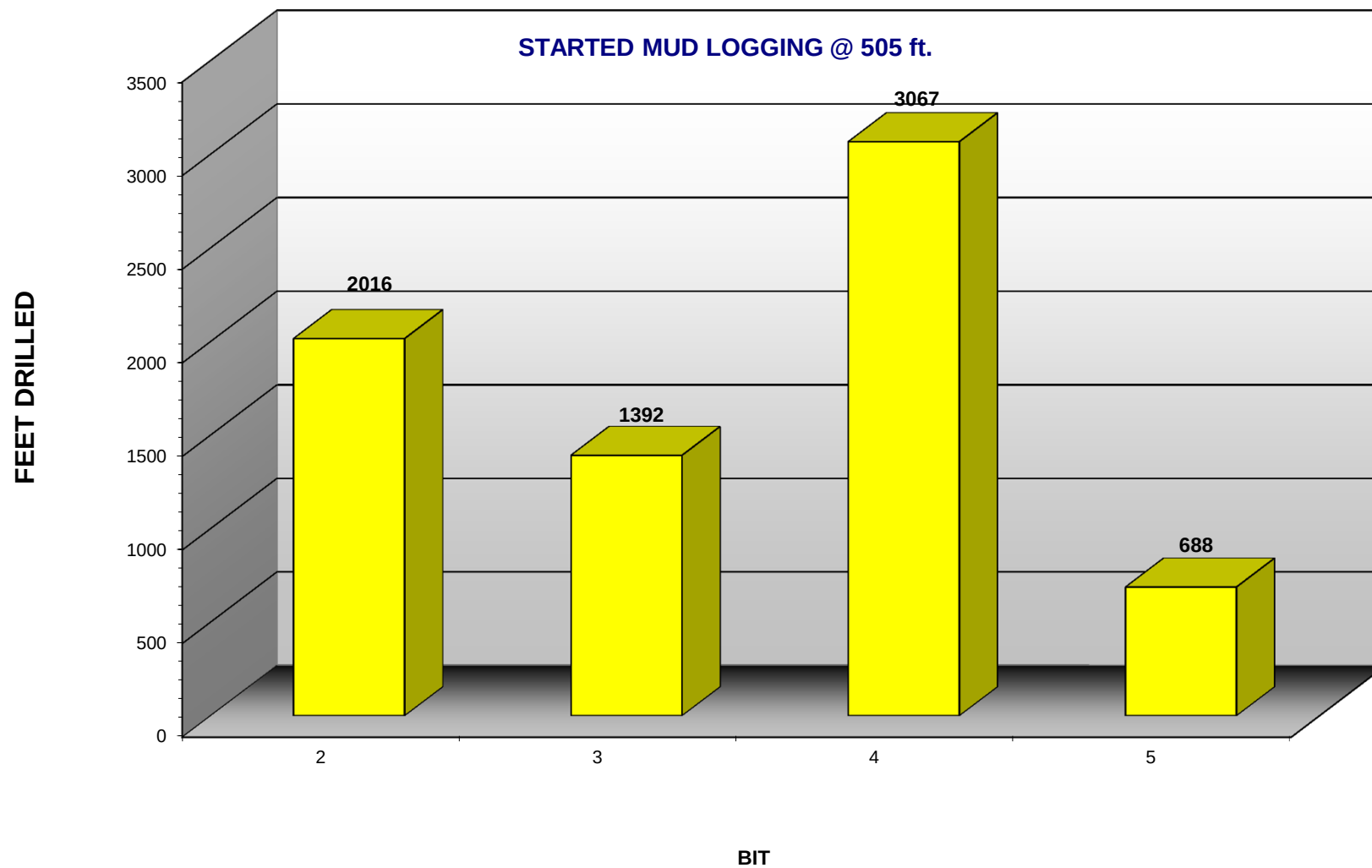
BIT	SIZE	MAKE	TYPE	SERIAL	DEPTH		HOLE	ROP Effective	HOURS	HOURS	JETS	GPM/PSI	WOB/RPM Klbs / rpm	IADC
	IN				IN	OUT	Made	MHR	Total	Drilling				
2	12 1/4	HALLIBURTON	FS2563Z	1147645	505	2521	2016	125.9	69.3	16.0	4X12;3X14	700/1600	11/70	2-3-LT-S-X-I-BT-TD
3	8 1/2	NOV	SKHI519M	A175491	2521	3913	1392	104.3	65.2	13.4	7X13	530/1850	14/70	0-0-RR-G-X-I-NO-HP
4	8 1/2RR	NOV	SKHI519M	A175491	3913	6980	3067	57.0	142.8	53.8	7X13	530/2460	18/65	1-1-RR-G-X-I-NO-BHA
5	8 1/2	NOV	RSF519M	219108	6980	7668	688	73.3	39.5	9.4	7X12;1X13	540/2870	16/65	1-2-CT-G-X-1/16-NO-TD

FORMATIONS:	MD (ft)	TVD (ft)
TALARA	0	0.0
CHACRA	3125	2355.8
RIO BRAVO	5087	3268.4
RIO BRAVO SHALY	7489	4568.3
TD	7668	4687.9

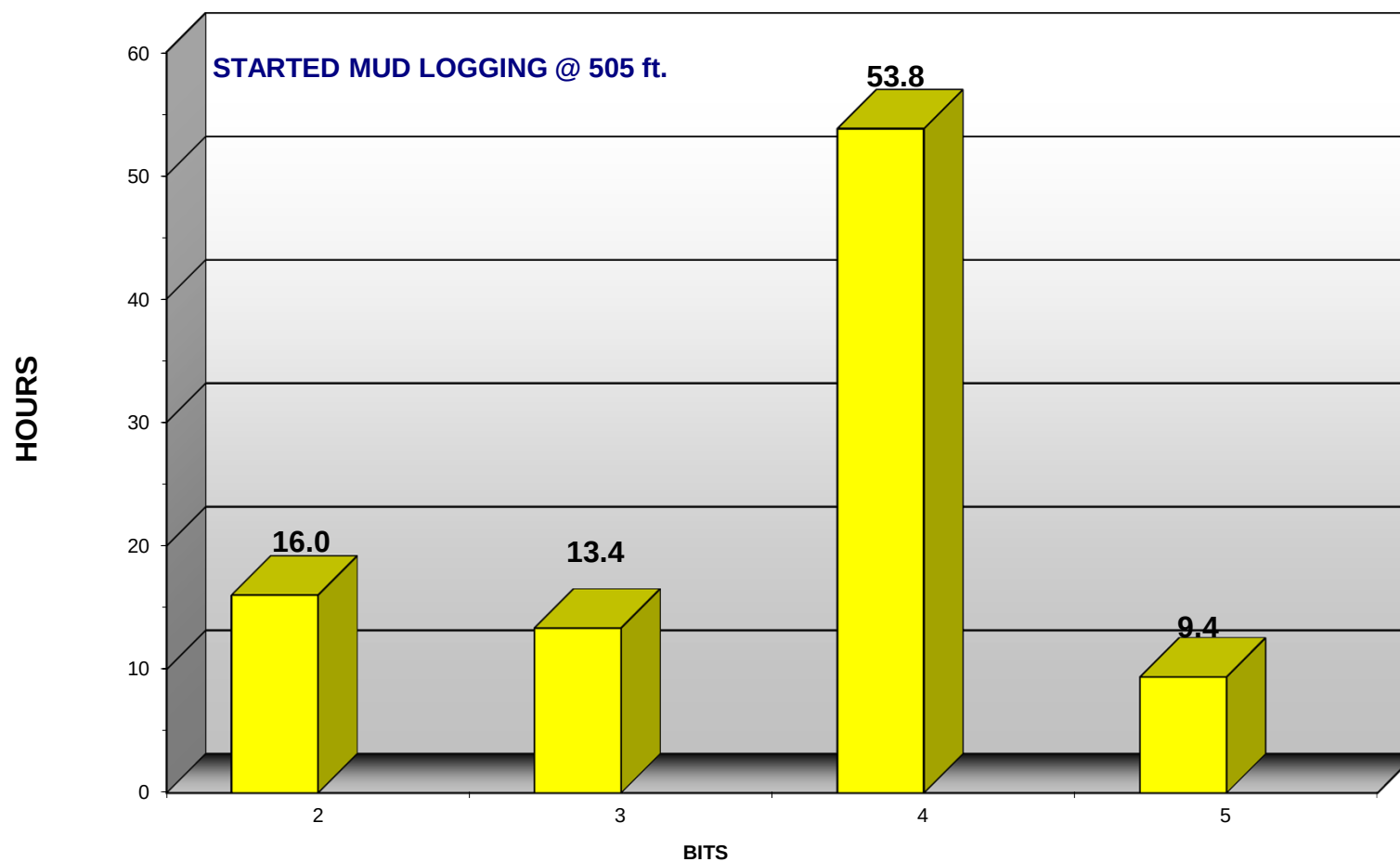
WELL : LO6-31D
**EFFECTIVE AND AVERAGE RATE OF
PENETRATION BY BIT (ft/hr)**



WELL : LO6-31D
FEET DRILLING BY BIT



WELL : LO6-31D
EFFECTIVE DRILLING HOURS



DAILY OPERATIONS REPORTS

WELL: LO6-31D

May 24th, 2013

00:00 – 06:00 Pepesa M/U 25 stands 5" DP. Preparing drilling floor and Rig up 12 1/4" tricone bit.

06:00 – 09:00 M/U and TIH slick BHA with 12 1/4" tricone bit. Tag TOC @ 485'.

09:00 – 10:00 Drill out cement from 485' to 505'. Ream and circulate.

10:00 – 10:30 Drill with 12 1/4" tricone bit from 505' to 507'. No debris.

10:30 – 11:30 Circulate, geology confirm formation ok and Displace sea water for mud 8.8 ppg.

11:30 – 12:30 Drill formation from 507' to 520' with MW 8.8 ppg. WOB 5/10 klbs, 60 rpm, 505 gpm.

12:30 – 13:00 Circulate bottom up, Geology confirm formation.

13:00 – 15:00 POOH Slick BHA with 12 1/4" tricone bit.

15:00 – 17:30 M/U and TIH Directional BHA with 12 1/4" PDC bit (FS2563Z, Jets 4x12; 3x14), mud motor BH 1.5 deg, UBHO, X/O, 6 1/2" DC, X/O, 18 HWDP.

17:30 – 18:00 Circulate bottom up and condition mud.

18:00 – 00:00 Dir. drill from 520' to 642'. WOB 10 klbs, press 1000 psi, 620 gpm. Last Gyro survey @ 572', incl 1.51 deg, azm 40.32 deg.

May 25th, 2013

00:00 – 01:00 Take Gyrodata survey @ 600', incl 1.19 deg, azm 84.04 deg. Make connection, circulate.

01:00 – 02:00 Directional confirm Gyrodata. Take survey 600', incl 1.10 deg, azm 86.26 deg.

02:00 – 03:00 Dir. drill with 12 1/4" PDC bit from 642' to 677'. Circulate.

03:00 – 04:00 Take Gyrodata survey @ 636'. incl 1.36 deg, azm 140.69 deg.

04:00 – 04:30 Dir. drill from 677' to 699'. WOB 10, pres 1010 psi, 670 gpm. Circulate.

04:30 – 05:30 Take Gyrodata survey @ 655', incl 1.75 deg, azm 166.75 deg.

05:30 – 06:00 Dir. drill from 699' to 726'. WOB 9 klbs, pres 1130 psi, 665 gpm. Last Geology sample @ 680 ft, 70% Claystone, 20% sandstone, 10% sand.

06:00 – 10:00 Accumulate Dir. drill rotating and sliding from 726' to 809'. WOB 9/11 klbs pres 1300 psi, 710 gpm.

10:00 – 12:00 Accumulate Survey. Last Gyrodata survey @ 772', incl 7.34 deg, azm 191.93 deg.

12:00 – 13:30 Accumulate Dir. drill rotating and sliding from 809' to 1002'. WOB 12 klbs, pres 1400 psi, 720 gpm.

13:30 – 15:00 Accumulate Survey. Last Gyrodata survey @ 772', incl 7.34 deg, azm 191.93 deg.

15:00 – 15:30 Dir. drill rotating and sliding from 1002' to 1096'. WOB 11 klbs, pres 1400 psi, 725 gpm.

15:30 – 16:30 Take Gyrodata Survey @ 1058', incl 15.89 deg, azm 188.66 deg.

16:30 – 19:30 Pooh dir. BHA w/ 12 1/4" PDC bit and UBHO. L/D UBHO.

19:30 – 00:00 TIH dir. BHA w/ 12 1/4" PDC bit and MWD to 584'.

May 26th, 2013

00:00 – 00:30 Continue TIH from 584' to 1096'.

00:30 – 01:00 Circulate bottom up, shaker clean, ok.

01:00 – 03:30	Accumulate dir. drill sliding from 1096' to 1271'. WOB 10 klbs, pres 1690 psi, 710 gpm.
03:30 – 05:00	Accumulate dir. drill rotating from 1271' to 1462'. WOB 13 klbs, pres 1750 psi, 740 gpm, 70 rpm.
05:00 – 06:00	Accumulate circulation and survey. Last survey @ 1393', incl 29.7 deg, azm 198.2 deg. Last geology sample FM Talara, 100% Claystone.
06:00 – 11:00	Accumulate dir. drill sliding from 1462' to 1791'. WOB 9 klbs, pres 2000 psi, 740 gpm.
11:00 – 13:00	Accumulate dir. drill rotating from 1791' to 2128'. WOB 10 klbs, pres 2050 psi, 740 gpm, 72 rpm.
13:00 – 15:00	Accumulate circulation and surveys. Last survey @ 2059', incl 54.9 deg, azm 226.6 deg. Last geology sample @ 2090', 100% Claystone.
15:00 – 18:00	Accumulate dir. drill sliding from 2128' to 2291' WOB 10 klbs, pres 2050 psi, 740 gpm.
18:00 – 21:00	Accumulate dir. drill rotating from 2291' to 2521'. WOB 10 klbs, pres 2170 psi, 740 gpm, 70 rpm.
21:00 – 22:00	Accumulate circulation and survey. Last survey @ 2451', incl 60.7 deg, azm 243.1 deg.
22:00 – 23:00	Circulate bottom to obtain geology sample, @ 2521' FM Talara, 100% Claystone.
23:00 – 00:00	Pump vis pill, circulate, shaker clean, ok. MW 10.1 ppg.

May 27th, 2013

00:00 – 01:00	Pull out BHA w/ 12 1/4" PDC bit and directional tool, from 2521' to 2071'. Perform flow check, ok. MW: 10.1 ppg.
01:00 – 06:00	Continue POOH 12 1/4" PDC bit from 2071' to surface. L/D directional tools (Jar, monels, MWD, mud motor).
06:00 – 10:00	M/U and TIH slick BHA w/ 12 1/4" tricone bit to 2521 ft. last 3 stands with pump.
10:00 – 11:30	Circulate, pump vis pill, condition hole, MW 10.1 ppg.
11:30 – 12:00	Pepesa perform rig service.
12:00 – 16:00	Pull out, 3 stands to 2248'. Perform flow check, ok. Continue Pooh 12 1/4" tricone bit from 2248' to surface'. free.
16:00 – 18:00	Pepesa change links on top drive, rig down hydraulic tong. Rig up ITS hydraulic tong, install links 18 ft. and install spider. Rig up 2 joint casing, install 9 5/8" shoe and 9 5/8" float valve.
18:00 – 18:30	Perform safety meeting with ITS and Pepesa crew.
18:30 – 20:00	Rig up 9 5/8" shoe, 2 joints casing 9 5/8" (N-80, 43.5 lb/ft. BTC), float valve to 77'.
20:00 – 00:00	TIH 9 5/8" casing (N-80, 43.5 lb/ft, BTC) from 77' to 1045'.

May 28th, 2013

00:00 – 03:30	Continue running 9 5/8" casing from 1045' to 2521'. Medomack vessel arrived to location at 2:30 a.m.
03:30 – 04:00	Install circulation head, and circulate bottoms up with 320 gpm.
04:00 – 06:30	Medomack position next to Perla barge, and rig up cement lines to platform. Install bottom and top plugs in cement head. Preparing to perform cement job.
06:30 – 07:00	Safety meeting with Halliburton and Pepesa personnel.
07:00 – 08:30	Test cement lines with 2600 psi, 5 min, ok. Pump 20 bbl. mudflush 8.4 ppg, 5 bpm, 320 psi; 25 bbls Tuned spacer 11.5 ppg, 5 bpm, 385 psi. Mix cement. Drop bottom plug.
08:30 – 10:00	Pump Econocem I cement 236 bbls, 12.5 ppg, 5 bpm, 300 psi. Mix and pump

10:00 – 11:00	57 bbls Halcem I, 15.2 ppg, 3 bpm, 220 psi. Drop top plug, displace cement with mud 10.1 ppg. 7 bpm, 480 psi. Sit plug w/ 286 bbls mud, pres 450 psi. Return 10 bbls cement to surface. Increase pressure to 1000 psi. ok. Back flow 1.5 bbls.
11:00 – 13:30	WOC. Halliburton rig down cement head and cement lines. Pepesa clean 13 5/8" BOP and perform maneuver to hold BOP.
13:30 – 15:00	Cut window to 18" conductor and weld ring between 18" cond. & 9 5/8" csg.
15:00 – 16:30	Cut 9 5/8" casing on first level and L/D stretch 9 5/8" joint.
16:30 – 19:30	Nipple down 9 5/8" BOP on second level of platform. L/D 18" raiser.
19:30 – 21:00	Fetco personnel cut and bevel 9 5/8" csg and install 9 5/8" csg head. Test with 1200 psi, ok.
21:00 – 00:00	Pepesa install 3 ft. 11x3M flange on top of 9 5/8" csg head. Tight bolts.

May 29th, 2013

00:00 – 06:00	Pepesa Nipple up raiser and 13 5/8"x5M drilling spool, BOP stack, connect kill line, choke line and install bell nipple.
06:00 – 12:00	SIG Audit ISO 9001, ISO 14001, OHSAS 18001, from Bureau Veritas on location. Pepesa install flow line, weld stops to 18" conductor on first level of platform.
12:00 – 15:00	Continue SIG audit ISO 9001, ISO 14001, OHSAS 18001 from Bureau Veritas. Install 9 5/8" plug tester, test operative BOP open/close. Move material from platform to barge.
15:00 – 21:00	Pepesa personnel Socola Veliz and Amaya Vilela arrived to location, install mechanical cat, cut and locate flat iron below drilling rig to level drilling table. Perform BOP test. Pipe rams, 300 & 3000 psi, by 10 min, ok. Annular w/ 300 & 1500 psi, by 10 min, ok. 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.
21:00 – 00:00	Pepesa cut and locate flat iron below drilling rig skid to level drilling table.

May 30th, 2013

00:00 – 04:30	Pepesa continue cut and locate flat iron below drilling rig skid to level drilling table.
04:30 – 08:30	Center 13 5/8" BOP on second level of platform. Rig up 5" DP from barge to platform, measure and take serial number.
08:30 – 13:30	Wait on to rig up 5" DP, for crane reparation. M&R mechanical change 670 ft. 7/8" cable to Monitowoc 020 crane on Perla barge. Change diesel to crane motor. Last cable was change 17-05-13.
13:30 – 15:00	M&R mechanical finish to repair cable crane. Continue rig up 5" drill pipe from barge to platform.
15:00 – 00:00	Pepesa continue rig up and M/U 5" drill pipe in stands, 46 stands, 138 joints.

May 31st, 2013

00:00 – 05:00	Continue 5" drill pipe measure and take serial number, M/U stands. Total 80 stands, 240 joints. Arrived directional WTF tools at 01:00 am.
05:00 – 10:00	WTF Rig up tools, measure tools, and prepare drilling table to run dir. BHA w/ 8 1/2" PDC bit. Rig up 8 1/2" PDC bit (SKHI519M, Jets 7x13). WTF testing on surface LWD tool.
10:00 – 12:30	M/U and TIH 8 1/2" bit w/ mud motor, test mud motor with 350 gpm, 300 psi, ok. Continue TIH to 67 ft.

12:30 – 14:00	WTF programming LWD (HEL tool) in hole.
14:00 – 18:00	Continue TIH dir. BHA with 8 1/2" PDC bit from 67' to 2311'.
18:00 – 18:30	WTF test depth sensor and Motary tool.
18:30 – 19:00	Continue TIH from 2311' to 2442'. Tag TOC @ 2442'.
19:00 – 21:00	Drill out cement with 8 1/2" PDC bit, drill top/bottom plug and float valve at 2444', continue drilling to 2505'.
21:00 – 21:30	Circulate, perform casing test @ 2505' with 1000 psi, ok.
21:30 – 22:30	Dir. drill from 2505' to shoe 2521'. Drill 11 ft. of formation to 2532'.
22:30 – 23:30	Circulate, geology confirm 100% formation, ok. Displace contaminate mud for new mud, 10.3 ppg.
23:30 – 00:00	Clean shaker pit on second level. Perform FIT. mud weight 10.3 ppg, pres 345 psi, EMW: 13.5 ppg. Ok

June 01st, 2013

00:00 – 05:00	Dir. drill rotating with 8 1/2" PDC bit from 2532' to 2950 psi. WOB 12/14 klbs, pres 1850 psi, 550 gpm, TQ 8 kft-lb, 65 rpm. At 2717' show 1188 units, drop to cero. MW 10.4 ppg.
05:00 – 06:00	Accumulate circulate, ream and survey. Survey @ 2863', incl 62.30 deg, azm 246.28 deg. Geology sample @ 2900', 70% Claystone, 20% siltstone, 10% sandstone. MW 10.4 ppg.
06:00 – 12:00	Dir. drill rotating with 8 1/2" PDC bit from 2950' to 3388'. WOB 15 klbs, pres 2438 psi, 552 gpm, 67 rpm, TQ 8 kft-lb.
12:00 – 13:00	Accumulate circulate, ream and survey. Survey @ 3243', incl 61.29 deg, azm 246.49 deg. Geology sample, 90% Claystone, 10% siltstone, FM Talara.
13:00 – 14:30	Pepesa pull out 8 1/2" PDC bit to 9 5/8" shoe @ 2521'. SCR shut down, pumps do not receive signal. Pull out without pumps. Pepesa personnel repair SCR.
14:30 – 15:00	Pepesa continue repairing SCR drill console cable.
15:00 – 15:30	TIH from 2521' to 3388'. Circulate, pump vis pill, ok.
15:30 – 23:00	Dir. drill rotating with 8 1/2" PDC bit from 3388' to 3860'. WOB 14 klbs, 2270 psi, 530 gpm, TQ 8 kft-lb, 65 rpm. Pump hi vis pill at 3670 ft.
23:00 – 23:30	Circulate, ream and surveys. Last survey @ 3810.8', incl 61.14 deg, azm 244.53 deg. Geology sample @ 3860', 100% claystone, FM Chacra. MW: 10.6 ppg.
23:30 – 00:00	Continue circulating while Pepesa change alternator to generator. (rig service.).

June 02nd, 2013

00:00 – 01:00	Dir. drill sliding with 8 1/2" PDC bit from 3860' to 3900'. WOB 25 klbs, pres 1900 psi, 500 gpm. MW: 10.7 ppg.
01:00 – 01:30	Dir. drill rotating from 3900' to 3913'. WOB 16 klbs, pres 2300 psi, 520 gpm, 65 rpm, TQ 9 kft-lb. Stuck pipe, work string up/down.
01:30 – 06:00	Work string up/down, range 4 ft. no circulation or rotation. Hold pressure 350 psi in string.
06:00 – 11:30	Working string up/down. Work Jar, hold 350 psi in string, no rotation.
11:30 – 12:30	Pepesa L/D 5" DP maneuver joint. Connect top drive to next joint (20 ft. above drilling table).
12:30 – 13:30	Continue working string up/down. Work Jar, hold 350 psi in string, no rotation.
13:30 – 14:30	Rig motor #2 broke crank screws. Change screws.
14:30 – 15:00	Continue working string up/down. Work Jar, hold 350-600 psi in string, no rotation. Tensionate to 250-300Klb. Jarring upwards. Work with torque, tension & pressure.
15:00 – 17:30	Continue working string up/down. Work Jar, hold 350-600 psi in string, no rotation. Tensionate to 250-300Klb. Jarring upwards. Recover partial circulation

17:30 – 19:00	and rotation. Increase pump rate gradually. Reciprocate string @3893ft. w/550gpm 2500psi. 70rpm. Disconnect 1 stand and continue reciprocating and circulating.
19:00 – 21:00	POOH w/circulation as precaution from 3750ft to 2450ft.
21:00 – 22:00	Circulate inside Csg shoe @2450ft. w/500gpm 2200psi. Shakers full.
22:00 – 00:00	Cont. POOH dir. BHA with 8 1/2" PDC bit from 2450' to 192'.

June 03rd, 2013

00:00 – 02:30	Cont. POOH dir. BHA with 8 1/2" PDC bit. L/D jar, HEL LWD and mud motor.
02:30 – 05:30	WTF perform surface test to LWD tool. PEPESAC inspect Top Drive and change saver sub connection.
05:30 – 06:00	Condition rig floor.
06:00 – 08:00	Wait on transport to receive Spare WTF HEL LWD tool & Sulphate potassium.
08:00 – 10:00	Receive spare HEL LWD tool. Change part from pulser to used HEL LWD tool. Recalibrate HEL LWD tool. Programming LWD and MSS.
10:00 – 11:00	M/U and TIH 8 1/2" PDC bit (SKHI519M, jets 7x13), Motary mud motor, 1 short DC, HEL LWD, 1 Monel, X/O, 2 DC, to 96 ft.
11:00 – 11:30	Perform shallow test, 350 gpm, pres 530 psi, ok.
11:30 – 14:30	Continue TIH dir. BHA from 96 ft. to 2521'. Shoe 9 5/8".
14:30 – 15:00	Circulate bottom up, shaker clean, ok.
15:00 – 17:00	Continue TIH with dir. BHA and 8 1/2" PDC bit from 2521' to 3913'. Last 2 stands with circulation.
17:00 – 18:00	Circulate bottoms up, pump vis pill. shaker clean, ok.
18:00 – 22:30	Dir. drill rotating from 3913' to 4173'. WOB 12/14 klbs, pres 2380 psi, 540 gpm, 57 rpm, TQ 8.5 kft-lb.
22:30 – 23:00	Dir. drill slide from 4173' to 4188' WOB 14/16Klb, pres 2020psi, 525gpm.
23:00 – 23:30	Dir. drill rotating from 4188' to 4236'. WOB 12/14 klbs, pres 2380 psi, 540 gpm, 60 rpm, TQ 8.5 kft-lb.
23:30 – 00:00	Pump sweep and displace 25Bbl x 120sec visc. Condition mud, increase K+ conc.

June 04th, 2013

00:00 – 00:30	Cont. circulating pill till shakers clean. Condition mud, increase K+ conc.
00:30 – 01:00	Dir. drill slide from 4236' to 4251' WOB 14/16Klb, pres 2100psi, 525gpm.
01:00 – 04:30	Dir. drill rotating from 4251' to 4425'. WOB 12/14 klbs, pres 2600 psi, 540 gpm, 60 rpm, TQ 8.5 kft-lb.
04:30 – 05:00	Dir. drill slide from 4425' to 4440' WOB 17/20Klb, pres 2300psi 550gpm.
05:00 – 06:30	Dir. drill rotating from 4440' to 4529'. WOB 17/19 klbs, pres 2600 psi, 540 gpm, 60 rpm, TQ 8.5 kft-lb. Last sample @4500' 100%Clst.
06:30 – 07:00	Circulate bottoms up, pump vis pill, condition mud.
07:00 – 07:30	Dir. drill sliding from 4529' to 4549'. WOB 18 klbs, pres 2200 psi, 550 gpm.
07:30 – 10:00	Dir. drill rotating from 4549' to 4618'. WOB 18 klbs, pres 2550 psi, 550 gpm, TQ 8.2 kft-lb.
10:00 – 10:30	Dir. drill sliding from 4618' to 4640'. WOB 15/20 klbs, pres 2250 psi, 540 gpm.
10:30 – 11:30	Dir. drill rotating from 4640' to 4717'. WOB 20 klbs, pres 2588 psi, 550 gpm, TQ 8.5 kft-lb.
11:30 – 12:30	Accumulate circulation and survey. Survey @ 4659', incl 62.52 deg, azm 241.02 deg. Geology sample, 100% claystone.
12:30 – 13:00	Dir. drill sliding from 4717' to 4738'. WOB 22 klbs, pres 2200 psi, 540 gpm.
13:00 – 20:00	Dir. drill rotating from 4738' to 5098'. WOB 18 klbs, pres 2640 psi, 550 gpm, 65 rpm, TQ 8.6 kft-lb. Survey @ 5037.8', incl 61.1 deg, azm 239.5 deg. Geology

	sample 100% Claystone.
20:00 – 20:30	Dir. drill sliding from 5098' to 5111'. WOB 26 klbs, pres 2320 psi, 540 gpm.
20:30 – 21:30	Dir. drill rotating from 5111' to 5178'. WOB 14 klbs, pres 2600 psi, 550 gpm, TQ 9 kft-lb. Geology Top of Rio Bravo FM 5088 ft. 5% fluorescence.
21:30 – 23:00	Circulate bottom up, pump heavy pill, circulate. MW 11.0 ppg, ECD 12.7 ppg. Geology sample FM Rio Bravo @ 5178', 80% claystone, 10% siltstone, 10% sand. Survey @ 5131', incl 62 deg, azm 240.25 deg.
23:00 – 00:00	Dir. drill rotating from 5178' to 5243. WOB 16 klbs, pres 2670 psi, 545 gpm, 60 rpm, TQ 9 kft-lb.

June 05th, 2013

00:00 – 04:00	Dir. drill rotating from 5243' to 5380'. WOB 19 klbs, pres 2700 psi, 545 gpm, 62 rpm, TQ 9.5 kft-lb.
04:00 – 04:30	Dir. drill sliding from 5380' to 5391'. WOB 36 klbs, pres 2350 psi, 530 gpm.
04:30 – 05:30	Dir. drill rotating from 5391' to 5468'. WOB 19 klbs, pres 2660 psi, 550 gpm, 60 rpm, TQ 10 kft-lb.
05:30 – 06:30	Accumulate circulation and survey. Last survey @ 5319.66', incl 62.43 deg, 239.47 deg. Geology sample @ 5180', FM Rio Bravo, 80% Claystone, 10% Siltstone, 10% Sand. MW: 11 ppg.
06:30 – 07:30	Dir. drill rotating from 5468' to 5556'. WOB 22 klbs, pres 2780 psi, 540 gpm, 63 rpm, TQ 10.5 kft-lb.
07:30 – 09:00	Circulate obtain geology sample FM Rio Bravo @ 5556', 60% claystone, 20% sandstone, 10% sand. Pump vis pill, circulate bottom up. Survey @ 5507.52', incl 61.86 deg, azm 238.99 deg.
09:00 – 10:00	Pull out 6 stands with pump and with out rotation, free. to 5094'.
10:00 – 13:00	Continue pull out from 5094' to 2484'. with out pump/rotation.
13:00 – 14:00	Pepesa cut off 150 ft. and slip 100 ft. drilling line.
14:00 – 14:30	Pepesa rig service. WTF test Motary and calibrate depth sensor, ok.
14:30 – 17:30	TIH dir. BHA with 8 1/2" PDC bit from 2484' to 5556'.
17:30 – 19:00	Circulate bottom up, pump vis pill, condition mud. Shakers clean, ok.
19:00 – 21:00	Dir. drill rotating from 5556' to 5663' WOB 20 klbs, pres 2800/2900 psi, 540 gpm, 60 rpm, TQ 10.5 kft-lb.
21:00 – 22:00	Dir. drill sliding from 5663' to 5676'. WOB 35 klbs, pres 2570 psi, 548 gpm.
22:00 – 00:00	Dir. drill rotating from 5676' to 5745'. WOB 20 klbs, pres 2900 psi, 550 gpm, 60 rpm, TQ 10.5 kft-lb. Survey @ 5697', incl 61.62 deg, azm 238.49 deg.

June 06th, 2013

00:00 – 06:00	Dir. drill rotating from 5745' to 5943'. WOB 20 klbs, pres 2890 psi, 540 gpm, 64 rpm, TQ 10.3 kft-lb. Last survey @ 5885.97', incl 61.30 deg, azm 237.69 deg. Geology sample FM Rio Bravo @ 5930', 70% sandstone, 20% sand, 10% claystone. MW: 11.0 ppg.
06:00 – 08:30	Dir. drill rotating from 5943' to 6045'. WOB 20 klbs, pres 2900 psi, 550 gpm, 65 rpm.
08:30 – 09:30	Dir. drill sliding from 6045' to 6065'. WOB 45 klbs, pres 2500 psi, 542 gpm.
09:30 – 11:00	Dir. drill rotating from 6065' to 6123. WOB 20 klbs, pres 2900 psi, 540 gpm, 60 rpm, TQ 10.3 kft-lb.
11:00 – 12:30	Circulate bottom up, pump vis pill, shaker clean. Take survey @ 6076.19 ft. incl 59.61 deg, azm 236.96 deg.
12:30 – 13:30	Dir. drill rotating from 6123' to 6230'. WOB 22 klbs, pres 2900 psi, 550 gpm, TQ 10.5 kft-lb.
13:30 – 14:30	Accumulate circulate and survey. Survey @ 6171.86 ft. incl 59.83 deg, azm

	237.14 deg.
14:30 – 16:00	Dir. drill sliding from 6230' to 6250' WOB 35 klbs, pres 2550 psi, 540 gpm. Geology sample 90% claystone, 10% siltstone. MW 11.0 ppg.
16:00 – 17:00	Dir. drill rotating from 6250 to 6316' WOB 18 klbs, pres 2900 psi, 547 gpm, 62 rpm, TQ 11 kft-lb. Show gas 400 unit, drop to 100 units.
17:00 – 17:30	Circulate and survey @ 6267.01 ft. incl 57.85 deg, azm 237.45 deg.
17:30 – 19:00	Dir. drill sliding from 6316' to 6338'. WOB 25 klbs, pres 2550 psi, 550 gpm.
19:00 – 21:00	Dir. drill rotating from 6338' to 6410'. WOB 22 klbs, pres 3000 psi, 550 gpm, 62 rpm, TQ 11 kft-lb. 40 ft./hr.
21:00 – 22:00	Circulate, pump heavy pill, circulate. Take survey @ 6362.04', incl 56.31 deg, azm 237.82 deg.
22:00 – 00:00	Dir. drill rotating from 6410' to 6478'. WOB 23 klbs, pres 2930 psi, 540 gpm, 62 rpm, TQ 11 kft-lb. Geology sample 6470', 40% Sand, 30% Sandstone, 30% Claystone.

June 07th, 2013

00:00 – 05:00	Dir. drill rotating from 6478' to 6613'. WOB 23 klbs, pres 2950 psi, 550 gpm, 65 rpm, TQ 12 kft-lb. ROP 38/30 ft./hr.
05:00 – 08:00	Dir. drill sliding from 6613' to 6695'. WOB 48 klbs, pres 2590 psi, 540 gpm. Last survey @ 6552.4 ft. incl 57.07 deg, azm 238.53 deg. Geology sample FM Rio Bravo @ 6610', 50% sandstone, 50% claystone.
08:00 – 09:00	Accumulate circulating and surveys.
09:00 – 09:30	Dir. drill rotating from 6695' to 6706'. WOB 17 klbs, pres 2940 psi, 540 gpm, 65 rpm, TQ 12.5 kft-lb.
09:30 – 10:30	Dir. drill sliding from 6706' to 6721'. WOB 24 klbs, pres 2680 psi, 548 gpm.
10:30 – 11:00	Drill, from 6721' to 6733'. WOB 16 klbs, pres 3012 psi, 540 gpm, 63 rpm. ROP increase from 35 ft./hr. to 150 ft./hr. Circulate bottom up and observe hole, no gas. ok.
11:00 – 12:00	Dir. drill rotating from 6733' to 6799' Show gas 962 units. drop to cero. Geology sample 70% sand, 30% sandstone. At 6790 ft. 30% Fluorescence.
12:00 – 13:00	Dir. drill sliding from 6799' to 6819'. WOB 15 klbs, pres 2540 psi, 550 gpm. Show gas 300 units, drop to 40 units.
13:00 – 14:30	Dir. drill rotating from 6819' to 6891'. WOB 16 klbs, pres 2980 psi, 550 gpm, 60 rpm, TQ 12 kft-lb.
14:30 – 15:30	Circulate and take survey @ 6836.29', incl 53.34 deg, azm 238.28 deg. Geology sample @ 6880', 50% sandstone, 30% claystone, 20% siltstone.
15:30 – 16:30	Dir. drill sliding from 6891' to 6906' Show connection gas 106 units. drop to cero units.
16:30 – 17:30	Dir. drill rotating from 6906' to 6980'. WOB 17 klbs, pres 2930 psi, 540 gpm, 64 rpm, TQ 13.5 kft-lb.
	No possible to continue drilling. Closed dock. shortages of industrial water and chemical products. Prepare to perform POOH to 9 5/8" shoe @ 2521'.
17:30 – 18:30	Circulate to obtain geology sample @ 6980' 40% sandstone, 40% claystone, 20% sand, 10% fluorescence. Last survey @ 6930.63' incl 51.69 deg, azm 237.77 deg.
18:30 – 19:30	Pump heavy pill, circulate bottoms up. shaker clean, ok. Perform rice test, average diameter hole 8.55 in.
19:30 – 20:30	POOH dir. BHA from 6980' to 6209' with pump. MW: 11.2 ppg.
20:30 – 00:00	Continue Pooh from 6209' to 2521'. with out pump/rotation. free. Circulated bottom up at shoe. ok. shaker clean.

June 08th, 2013

00:00 – 06:00 Closed dock. Shortages of industrial water and chemical products. Pepesa rig inspection top drive.

06:00 – 15:00 Closed dock. rough seas. wait on industrial water and mud chemical products.

15:00 – 00:00 Olympic boat arrived to location, moved personnel to Talara. Continue waiting on industrial water and mud chemical products.

June 09th, 2013

00:00 – 02:00 Continue waiting on industrial water and mud chemical products.

02:00 – 07:00 Ruby River vessel arrived to location and bring material (industrial water, chemical products and diesel). Pepesa POOH 8 1/2" PDC bit with directional BHA. L/D Motary, LWM and bit.

07:00 – 11:30 TIH dir. BHA with 8 1/2" PDC bit RSF519M, mud motor and MWD. Test tools, ok. Continue TIH to 2521'. 9 5/8" casing shoe.

11:30 – 12:00 Circulate bottom up. show gas 1050 units to surface. drop to cero. Show oil trace. Diver install 26" clamp to jacket at 5th elevation @ 180'.

12:00 – 14:00 TIH from 2521' to 4440'. Circulate, show gas 40 units. drop to cero.

14:00 – 15:30 Continue TIH from 4440' to 6980'.

15:30 – 16:30 Circulate bottom up @ 6980', show gas 3889 units. drop to cero.

16:30 – 17:30 Pump vis pill, circulate and displace new mud, 11.2 ppg.

17:30 – 20:00 Dir. drill rotating from 6980' to 7102'. WOB 17 klbs, pres 2800 psi, 550 gpm, 65 rpm, TQ 14 kft-lb.

20:00 – 21:00 Dir. drill sliding from 7102' to 7114'. WOB 45 klbs, pres 2700 psi, 545 gpm.

21:00 – 22:30 Dir. drill rotating from 7114' to 7177'. WOB 16 klbs, pres 2830 psi, 545 gpm, 62 rpm, TQ 1 klbs-ft.

22:30 – 23:00 Dir. drill sliding from 7177' to 7184. WOB 45 klbs, pres 2660 psi, 540 gpm.

23:00 – 00:00 Dir. drill rotating from 7184' to 7259'. WOB 16 klbs, pres 2800 psi, 550 gpm, 60 rpm, TQ 14 kft-lb. Survey @ 7191.59 ft. incl 49.65 deg, azm 238.45 deg. MW 11.3 ppg.

June 10th, 2013

00:00 – 05:00 Dir. drill rotating from 7259' to 7458'. WOB 16klbs, pres 2920 psi, 550 gpm, 65 rpm, TQ 13/14 kft-lb.

05:00 – 05:30 Dir. drill sliding from 7458' to 7465'. WOB 45 klbs, pres 2760 psi, 540 gpm.

05:30 – 07:00 Dir. drill rotating from 7465' to 7541'. WOB 15 klbs, pres 2870 psi, 550 gpm, 65 rpm, TQ 14 kft-lb. ROP avg. 50/70 ft./hr.
Last survey @ 7380.56 ft. incl 49.01 deg, azm 238.49 deg. Geology sample @ 7460', FM Rio Bravo, 60% claystone, 20% sand, 10% sandstone, 10% siltstone. MW: 11.3 ppg.

07:00 – 08:00 Circulate bottom up, clean hole, ok.

08:00 – 10:00 Dir. drill rotating from 7541' to 7636'. WOB 18 klbs, pres 3060 psi, 550 gpm, 65 rpm, TQ 14.5 kft-lb.

10:00 – 11:30 Received geology confirmation to TD well LO6-31D. Circulate to obtain geology sample.

11:30 – 12:00 Pick up 5" DP joint, make connection and drill from 7636' to 7668'. set casing tally depth. Show gas connection at 7637', 1269 gas units, drop to cero.

12:00 – 13:00 Hole TD @ 7668'. Circulate bottom up, obtain geology sample @ 7668', 90% claystone, 10% sandstone, Trace siltstone. Last survey @ 7602', incl 48.02 deg, azm 237.9 deg.



13:00 – 14:30	Pump heavy vis pill, circulate, condition mud. Shakers clean, MW 11.3+ ppg.
14:30 – 15:30	POOH dir. BHA with 8 1/2" PDC bit from 7668' to 7100', with pump. Perform flow check, ok. MW 11.4 ppg.
15:30 – 00:00	Continue Pooh dir. BHA with 8 1/2" PDC bit from 7668' to surface. without pump or rotation. L/D directional tools and 8 1/2" PDC bit.

June 11th, 2013

00:00 – 00:30	Prepare drilling floor to run Slick BHA.
00:30 – 03:30	M/U and TIH Slick BHA with 8 1/2" tricone bit from surface to 2521'.
03:30 – 04:00	Circulate bottom up, no gas, ok.
04:00 – 05:30	TIH Slick BHA from 2521' to 4600'.
05:30 – 06:00	Circulate, show 225 gas units. drop to cero, ok. Continue TIH slick BHA with 8 1/2" tricone bit.
06:00 – 09:30	Continue TIH slick BHA with 8 1/2" tricone bit from 4600' to 7668'. Last 2 stands with pump.
09:30 – 10:30	Circulate bottom up, show gas 3166 units, drop to cero.
10:30 – 11:30	Pump heavy pill, circulate, shakers clean, ok. Logging WTF personnel arrived to location, measure and prepare logging tool.
11:30 – 16:00	Pooh Slick BHA with 8 1/2" tricone bit from 7668' to 2521'. without pump or rotation.
16:00 – 16:30	Circulate bottom up at csg 9 5/8" shoe, ok.
16:30 – 19:30	Continue POOH 8 1/2" slick BHA from 2521' to surface.
19:30 – 20:00	Perform safety meeting with WTF and Pepesa crew.
20:00 – 00:00	Weatherford M/U and RIH logging BHA tools. Mule shoe, shuttle landing, 4 3/4" pipe 5, lower latch, upper latch, 4 3/4" pipe 1. WTF install logging tool inside BHA. to 207 ft.

June 12th, 2013

00:00 – 01:00	Continue installing logging tools and radioactive source inside BHA. TIH to 300'. Test circulation with 125 gpm, 90 psi.
01:00 – 04:00	TIH logging tool with string from 300' to 2521'. Test circulation with 125 gpm, 190 psi.
04:00 – 10:00	Continue TIH logging tool with string from 2521' to 7668'.
10:00 – 10:30	Test circulation with 127 gpm, pres 742 psi. pull out 2 stands from 7668' to 7493'.
10:30 – 11:30	WTF drop dart inside string, and pump dart with 88 gpm, 540 psi, 25 spm. Reciprocate string.
11:30 – 12:30	Dart break 2 pins sections, with 523 psi and 588 psi. Logging tool. Circulate bottom up with 360 gpm, 800 psi. Show gas to surface 1571 units. drop to 50 units.
12:30 – 15:30	POOH 5" DP and WTF logging (MDL-MPD-MDN-GR-CCL) with string from 7493
	ft. to 4950 ft.
15:30 – 18:00	Continue POOH 5" DP from 4950 ft. to 370 ft.
18:00 – 18:30	Pepesa install 3 1/2" clamp on 5" hydraulic elevator to L/D WTF 3 1/2" DP and logging tools.
18:30 – 20:30	L/D x/o, 3 1/2" pup joints, 6 joints 3 1/2" DP and L/D logging tools (MDL-MPD-MDN-GR-CCL).
20:30 – 21:00	M/U 5" running tool w/DP stand and retrieve wear bushing. While ITS crew install float equipment on the first three 5 1/2" csg on platform.
21:00 – 22:30	Pepesa L/D hawk jaw and condition rig floor and platform. Co. ITS perform R/U

	power unit and hydraulics hoses, hydraulic power tong, L/D 5" hydraulic elevator.
	L/D 4 ft. links and install 12 ft. links and 5.5" csg elevator.
22:30 – 23:00	Perform safety and operative meeting with Pepesa, WTF, ITS, Tramarsa, TGT lab and Savia crew.
23:00 – 00:00	P/U & M/U 5.5" csg shoe, 2 joint 5 1/2" csg 17 ppf, N-80, BTC. Install 1 joint SR & 1 joint BS centralizer, install 5 1/2" drillable float collar 17 ppf, N-80, BTC. Perform float equipment test, ok. Continue run 10 joints 5 1/2" csg, 17 ppf, N-80, BTC to 400 ft. Install 3 BS & 2 SR centralizers.
June 13th, 2013	
00:00 – 04:30	Continue run 55 jts 5 1/2" csg, 17 ppf, N-80, BTC from 400 ft to 2485 ft. Install 15 BS & 15 SR centralizers. Fill up 5.5" csg.
04:30 – 05:00	Brake gesls and circulate with 200 gpm, 300 psi. While Cia ITS install Fill Up Tool, 15" links and casing spider.
05:00 – 08:00	Continue run 44 jts 5 1/2" csg, 17 ppf, N-80, BTC from 2485 ft to 4167 ft. Fill up pipe each 5 joints.
08:00 – 08:30	Pepesa perform crew change and perform safety and operation meeting. While brake gels and circulate with 250 gpm and 210 psi.
08:30 – 11:30	Continue run 49 jts 5 1/2" csg, 17 ppf, N-80, BTC from 4167 ft to 6010 ft. Fill up pipe each 5 joints.
11:30 – 12:00	Perform safety and operation meeting due arrive Pepesa crew and perform crew change. While brake gels and circulate with 110 gpm and 280 psi.
12:00 – 14:30	Continue run 44 jts 5 1/2" csg, 17 ppf, N-80, BTC from 6010 ft to 7668 ft, lasts two 5 1/2" csg wash down to bottom. Total run 202 jt 5 1/2" csg plus 3 jt 5 1/2" pup joint 17 ppf, N-80, BTC and install 20 ea BS & 20 SR centralizers. At 14:30 hrs arrive Medomack River and Hall crew to location.
14:30 – 16:00	Circulate with 220 gpm and 420 psi. Reciprocate 5 1/2" csg string up to 15 ft on rig floor, parameters D/U 170 lkb, D/D 70 klb, HL 130 klb. While Tramarsa, Halliburton and Pepesa crew unload cement lines & tools from Medomack barge to platform. Hall crew M/U cmt lines from Medomack to rig floor, P/U cement lines and quick latch cmt head.
16:00 – 17:00	Stop circulation to L/D ITS fill up tool and spider elevator. M/U 5 1/2" side door elevator, install Hall quick latch cement head, cement lines and valves.
17:00 – 18:30	Continue circulate & reciprocate on bottom with 230 gpm, 530 psi, w/ full return by shakers. While perform safety and operation meeting with Pepesa, Halliburton, TGT, Tramarsa and Savia crew.
18:30 – 20:30	Halliburton perform cement lines test w/ 3000 psi by 10 min, ok. Begin cement job: Pump 50 bbl, 11.4 ppg low rheology mud, pump 25 bbl Mud Flush 8.4 ppg w/5 bpm, 450 psi, 40 bbl Turned Spacer III 12.5 ppg w/5bpm, 700/550 psi. Drop bottom plug. Halliburton begin mixs cement and pump 135 bbl EconoCem V, 13.5 ppg w/4.8 bpm, press 600 - 350 psi, Pump 182 bbl ExtendaCem V, 15.2 ppg w/4.6 bpm, press 350 - 650 psi. Pepesa & Hall personnel observed by shakers full return.
20:30 – 21:30	Drop top plug and displace w/182 bbl of mud 11.4 ppg w/6.4 - 2.5 bpm 460 – 920 psi, down rate pump to 2.5 bpm to perform wiper plug arrival with 628 psi, pressurezed to 1500 psi by 5 min, ok. Perform back flow 1 bbl, float collar valve, ok. leave closed cement head to ensure back flow. Csg shoe: 7666 ft, Float Collar: 7588 ft. Total cement used 1296 sxs (Pacasmayo V).
21:30 – 22:30	WOC while Halliburton L/D cement lines and Pepesa untight riser bolts.
22:30 – 00:00	Pepesa L/D kill line, HCR, lines and hydraulics lines from Koomy. L/D Bell



nipple and flow line sleeve.

CONCLUSIONS AND RECOMMENDATIONS

- The **LO6-31D**, is an Development well, and was drilled in three phases for 5.5" Casing from 505 feet to 7666 feet.
- During 8.5" phase, it was used mud WBAC type with mud weight between 10.3 ppg and 11.3 ppg.
- The last survey took was at 7602.00 feet MD, 4643.64 feet TVD with 48.02° of inclination and 237.90 degrees azimuth.
- The reservoir Rio Bravo top structurally was found at 5088.00 ft MD (RT), 3268.84 ft. TVD (RT), at 11.16 ft. more upper 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.