



TGT - LAB
REGISTROS GEOLOGICOS

FINAL WELL REPORT

WELL: LO6-30D

MARCH 2014

SAVIA PERU S.A.

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INTRODUCTION

TGT – LAB S.A.C. started Mud Logging Operations on the Well LO6-30D on March 05th, 2014 at 460 feet depth, and finished on March 30th, at the depth of 8198.0 feet TD(RT), with 5 1/2" Casing cementation; Casing Shoe at 8198 feet.

Origin:	
Surface Northing	9'508,658.51 m.
Surface Easting	459,043.47 m.
Main objective:	Rio Bravo
Objective Northing	9'507,757.26 m
Objective Easting	457,900.10 m
Kelly Bushing	50 ft.
Water depth	-335 ft.
Total Depth	8198 ft.
Reference	DATUM-WGS -84 UTM

It is proposed to drill a development well LO6-30D to produce oil of Rio Bravo reservoir in Lobitos oil field.

The well LO6-30D was drilled from platform Lobitos 6 and reached a final depth of 4491.9 feet (TVD).

The geological control for Rio Bravo reservoir 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 LO6-30D from 460 feet measured depth (Rotary Table) from March 05th, 2014; to the Final Total Depth at 8198 feet that was reached on March 30th, 2014.

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

This Unit was endowed with the following equipment:

Hook height measurement:

Draw work sensor

Drilling parameters:

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

Mud system:

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

Mud pumps:

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

Gas chain specification:

Gas trap neumatic shaker box
Gas Cromatograph FID SRI 8610C gas 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 7, for Geology Data control.
1 computer Windows 7, for Chromatograph control.
1 computer Windows 7, for Online transmission to Savia office.
1 computer Windows 7, for Repetition screen on CoMan office and Driller.

- 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 460 to 5680 feet; and each 10 feet from 5680 feet to 8198 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.

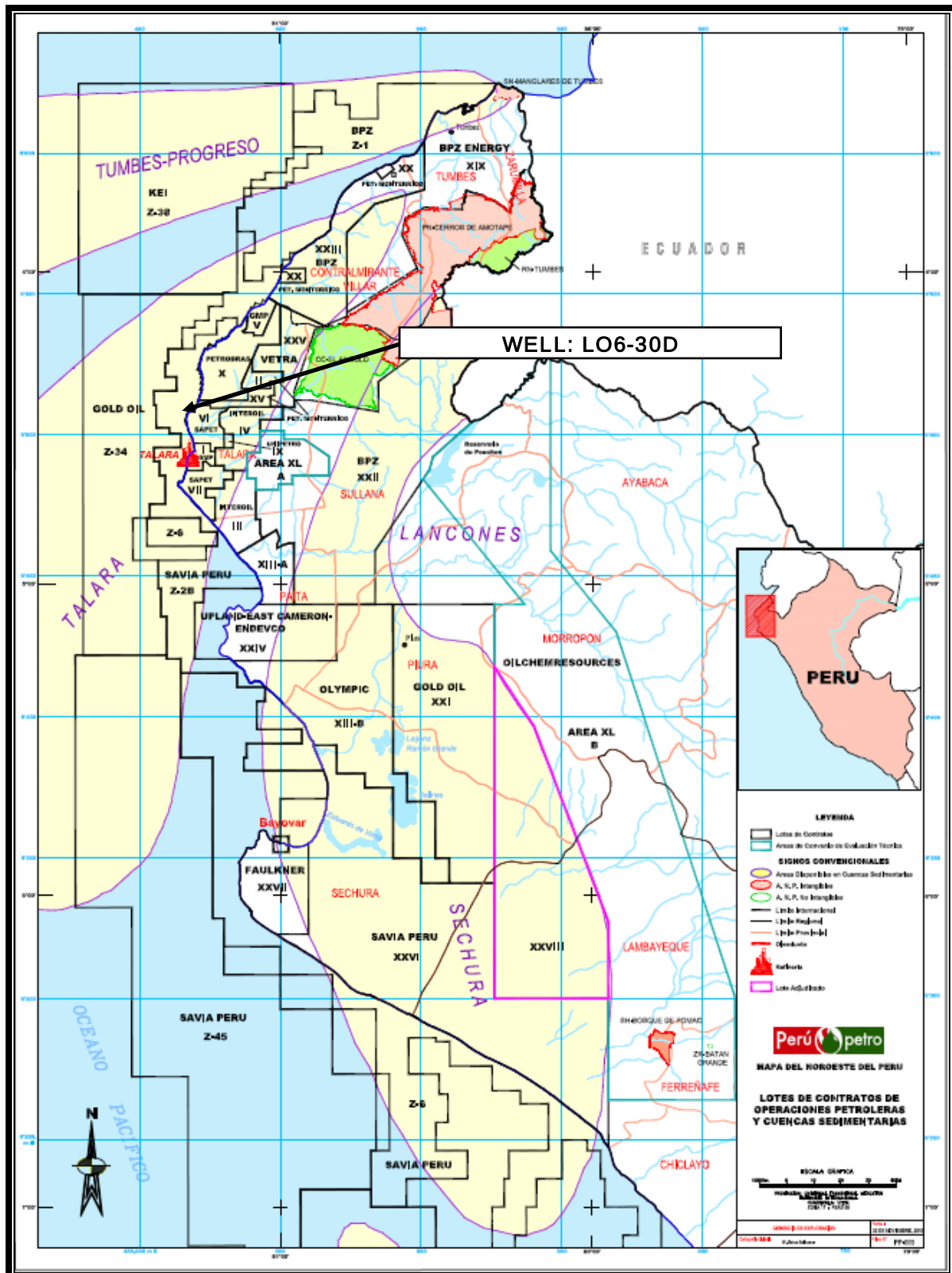


GEOLOGICAL REPORT



WELL AND RIG DATA

Company:	SAVIA PERU	
Well Name:	LO6-30D	
Well Type:	DEVELOPMENT	
Field:	LOBITOS OFFSHORE	
Basin:	TALARA	
State:	PIURA	
Country:	PERU	
Coordinates (WGS-84 UTM):	North	East
Origin:		
Main Objective: (RIO BRAVO FM)	9'507,757.26 m	457,900.10 m
Rotary table:	50 ft.	
Water Depth:	-335 ft.	
Spud Date:	MARCH 02 th 2014	
End Date:	MARCH 27 th 2013	
Total Depth:	8198.0 ft. MD (RT); 4491.9 ft. TVD (RT)	
Drilling Contractor / Rig:	PEPESA / P-40	
Drilling Fluids:	HALLIBURTON	
Logging Contractor:	WEATHERFORD	
Mud logging / Unit:	TGT LAB SAC	
Well site Geologist:	Dennis PAZ	
TGT-LAB Geologist:	Omar OJEDA / Edward MONASTERIO	



FORMATION TOPS

WELL LO6-30D

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)		
HELICO	-	-	-	-	-	-
LOBITOS	-	-	-	757,0	752,25	-702,25
TEREBRATULA	-	-	-	2855,0	2064,00	-2014,00
CHACRA	3000,0	2042,0	-1992,0	3120,0	2173,16	-2123,16
RIO BRAVO	6397,0	3530,0	-3480,0	5816,0	3293,50	-3243,50
FINAL T.D	7980,0	4350,0	-4300,0	8198,0	4491,90	-4441,90



STRATIGRAPHIC COLUMN

AGE			FORMATION/MEMBER	THICKNESS (ft)	LITHOLOGY	DESCRIPTION		
CENOZOIC	TERTIARY	EOCENE	HELICO	752,3		SANDSTONE: med dk gry, loc med gry, v-f qtz gr, hyal, sbang-sbrnd, wl srted, scrs arg mtrx, calc cmt, mod consol, loc ti, w/dk mnrls incl, p vis por. NOS. SAND: wh, 60% f, 40% vf, tr med qtz gr, hyal, trnsi, sbang-sbrnd, wl srted. CLAYSTONE: olv gry, loc olv blk, ea, biky-sbbloky, occ amor, mod frm-frm, micmic, miccarb, sli calc. SAND: wh, occ lit gry, 50% f, 40% m, 10% crs, tr vf qtz gr, hyal, trnsi, sbang-sbrnd, wl-fr srted, w/lits dk&gnsh.		
			LOBITOS	1311,8		SAND:wh, wh, 70% vf-f, 30% m, tr crs qtz gr, hyal, trnsi, sbang-sbrnd, fr srted. SANDSTONE: med dk gry, mnr med gry, occ lt gry, v-f qtz gr, hyal, sbang-sbrnd, wl srted, arg mtrx i/p, calc cmt, mod consol-mod fri, loc ti, dry i/p, w/dk&gnsh mnrls incl, p vis por. NOS. CLAYSTONE: olv gry, loc olv blk, ea, biky-sbbiky, mnr srtab, occ amor, mod frm-mod sft, micmic, miccarb i/p, occ w/disse py, sli calc. CLAYSTONE: olv blk, olv gry, ea, biky-sbbiky, mnr srtab, occ amor, mod frm-mod sft, micmic, miccarb i/p, occ w/disse py, sli calc. CLAYSTONE: olv blk, olv gry, ea, biky-sbbiky, loc srtab, occ amor, mod frm-frm, micmic, miccarb i/p, sli calc. CLAYSTONE: olv blk, olv gry, occ brnsh blk, ea, biky-sbbiky, loc srtab, occ amor, mod frm-frm, loc mod sft, occ stly, micmic, miccarb i/p, sli calc. CLAYSTONE: olv blk, loc olv gry, ea, biky-sbbiky, frm-mod frm, micmic, miccarb, v sli calc. SANDSTONE:med dk gry, mnr olv gry, med gry, v-f qtz gr, hyal, trnsi, sbang-sbrnd wl srted, arg mtrx, calc cmt, mod fri-mod consol, loc ti, dry i/p, w/dk&gnsh mnrls incl, p vis por. NOS. SAND: wh, 60% f, 30% m, 10% vf qtz gr, hyal, trnsi, sbang-sbrnd, wl srted, w/lits dk&gnsh. CLAYSTONE: med dk gry, mnr olv gry, occ dk gry, ea, biky-sbbiky, loc srtab, occ sblam, amor, mod frm-mod sft, occ frm, loc stly, micmic, miccarb i/p, sli calc. CLAYSTONE: med dk gry, mnr olv gry, occ dk gry, ea, biky-sbbiky, loc srtab, occ sblam, amor, mod frm-mod sft, occ frm, stly i/p, micmic, miccarb i/p, sli calc. SANDSTONE: med lt gry, lt gry, v-f qtz gr, hyal, trnsi, sbang-sbrnd, wl srted, arg mtrx i/p, calc cmt, mod fri-fr, occ ti, dry i/p, w/dk mnrls incl, micmic i/p, occ miccarb, p vis por. NOS. CLAYSTONE: med dk gry, mnr olv gry, occ olv blk, dk gry, ea, biky-sbbiky, loc srtab, occ sblam, amor, mod frm-mod sft, loc frm, stly i/p, micmic, miccarb i/p, occ sli calc. DOLOMITE: dk yelsh brn, occ brnsh gry, mass, sbbiky-sblam, occ biky, hd-mod hd, irr frac, miccarb i/p.		
			TELEBRATULA	109,2		SAND: med gry, loc med lt gry, v-f qtz gr, hyal, sbang-sbrnd, wl srted, arg mtrx, calc cmt, mod fri, w/dk mnrls incl, p vis por. N.O.S. SANDSTONE: med gry, med dk gry, v-f qtz gr, hyal, trnsi, sbang-sbrnd, wl srted, arg mtrx, calc cmt, mod consol-mod fri, w/dk mnrls incl, p vis por. Fluor: NVOS, Tr-20%NVOS, pin point pale yel nat fluor, crsh, wk, fnt, even, pl yel wh cut fluor, mky wh res ring under U. V. It, n res ring at nat lt. VPOS. CLAYSTONE: med dk gry, mnr olv blk, dk gry, ea, biky-sbbiky, loc srtab, occ sblam, amor, mod frm-frm, loc mod sft, stly i/p, micmic, miccarb, sli calc. SAND: wh, 80% vf-f, 20% m, gr, hyal, trnsi, sbang-sbrnd, fr srted.		
			CHACRA	1120,3		CLAYSTONE: olv blk, med dk gry, dk gry, ea, biky-sbbiky, loc srtab, occ sblam, amor, mod frm-frm, micmic, miccarb, sli calc. CLAYSTONE: olv blk, med dk gry, dk gry, ea, biky-sbbiky, loc tab, occ sblam, amor, mod frm-frm, micmic, miccarb, v sli calc. CLAYSTONE: olv blk, med dk gry, mnr olv gry, dk gry, ea, biky-sbbiky, loc tab, occ sblam, amor, mod frm-frm, stly i/p, micmic, miccarb, v sli calc. CLAYSTONE: olv blk, med dk gry, mnr olv gry, dk gry, ea, biky-sbbiky, loc srtab, occ sblam, amor, mod frm-mod sft, occ frm, stly i/p, micmic, miccarb, n calc-sli calc i/p. CLAYSTONE: med dk gry, olv blk, mnr olv gry, dk gry, ea, biky-sbbiky, loc srtab, occ sblam, amor, mod frm-frm, loc mod sft, stly i/p, occ w/cl incl, micmic, miccarb, n calc. SILTSTONE: med gry, med dk gry, ea, biky-sbbiky, srtab, mod frm, micmic i/p, miccarb, occ grad-vf sst, sli calc. CLAYSTONE: med dk gry, olv blk, mnr olv gry, dk gry, ea, biky-sbbiky, loc srtab, occ sblam, amor, mod frm-frm, loc mod sft, stly i/p, occ w/cl incl, micmic, miccarb, n calc-occ sli calc. CLAYSTONE: med dk gry, olv blk, olv gry, mnr dk gry, ea, bicky-sbbiky, occ loc srtab, occ sblam, mod frm-frm, occ mod sft, stly i/p, micmic, miccarb, n calc-sli calc. SANDSTONE:lt gry, med lt gry, v-f qtz gr, hyal, trnsi, sbang-sbrnd, wl srted, scrs arg mtrx, calc cmt, mod fri-mod consol, occ ti, w/dk&gnsh mnrls incl, micmic i/p, p vis por. SAND: wh, f-vf, tr med qtz gr, hyal, trnsi, sbang-sbrnd, wl srted. CLAYSTONE: med dk gry, olv blk, mnr olv gry, occ dk gry, ea, biky-sbbiky, loc srtab, occ sblam, mod frm-mod sft, loc frm, stly i/p, micmic, miccarb, n calc-sli calc i/p. CLAYSTONE: olv gry, med dk gry, olv blk, occ dk gry, ea, biky-sbbiky, loc srtab, occ sblam, mod frm-frm, loc mod sft, loc frm, stly i/p, micmic, miccarb, n calc-sli calc i/p. SILTSTONE: med dk gry, med gry, ea, biky-sbbiky, srtab, mod frm, micmic i/p, miccarb, grad vf sst i/p, sli calc i/p. LIMESTONE: dsky yelsh brn , dk yelish brn, occ olv blk, mass, sbbiky.biky, srtab i/p, loc sblamr, hd- mod hd, irr frac, mic i/p, occ miccarb. SANDSTONE: lt gry, loc med lt gry, v-f qtz gr, hyal, sbang-sbrnd, wl srted, arg mtrx, calc cmt, mod consol-mod fri, dry, w/dk&gnsh mnrls incl, p vis por. NOS. SAND: wh, v-f qtz gr, hyal, trnsi, sbang-sbrnd, wl srted. CLAYSTONE: olv gry, med dk gry, olv gry, mnr dk gry, med gry, ea, bicky-sbbiky, srtab i/p, occ amor, mod frm-frm, loc mod sft, stly i/p, micmic, miccarb, sli calc i/p.		
			RIO BRAVO	1198,4		SAND: wh, v-f qtz gr, hyal, trnsi, sbang-sbrnd, wl srted. SANDSTONE: lt gry, loc med lt gry, v-f qtz gr, hyal, sbang-sbrnd, wl srted, arg mtrx, calc cmt, mod consol-mod fri, dry, w/dk & gnsh mnrls incl, p vis por. Fluor: NVOS, Tr-30% pin point pal yel nat fluor, slw, wk, fnt, even, pl yel wh cut fluor, mky wh res ring under U. V. It, n res ring at nat lt. VPOS. CLAYSTONE: olv gry, med dk gry, olv gry, mnr dk gry, med gry, ea, biky-sbbiky, srtab i/p, occ amor, mod frm-frm, loc mod sft, stly i/p micmic, miccarb, sli calc i/p. SAND: wh, 70% f-vf, 30% m, tr crs qtz gr, hyal, trnsi, sbang-sbrnd, wl srted. SANDSTONE: lt gry, gnish gry, v lt gry, f-vf qtz gr, hyal, sbang-sbrnd, wl srted, scrs arg mtrx, calc cmt, fri-mod fri, occ ti, w/dk & gnsh mnrls incl,occy miccarb, micmic i/p, fr-p vis por. Fluor: NVOS, Tr pin point pal yel nat fluor, slw, wk, fnt, even, pl yel wh cut fluor, yel wh res ring under U. V. It, n res ring at nat lt. VPOS. CLAYSTONE: med dk gry, dk gry, mnr olv gry, occ med gry, ea, biky-sbbiky, srtab i/p, occ amor, mod frm-frm, occ mod sft, stly i/p, micmic, miccarb, n calc. SAND: wh, occ lt gry, 60% f, 20% vf, 20% m qtz gr, hyal, trnsi, sbang-sbrnd, wl srted. SANDSTONE: v lt gry, lt gry, f-vf qtz gr, hyal, sbang-sbrnd, wl srted, scrs arg mtrx, calc cmt, fri-mod fri, occ ti, w/dk & gnsh mnrls incl, occ miccarb, fr vis por. Fluor: NVOS, Tr-30% pin point pal yel nat fluor, slw-crsh, wk, fnt, even, yel wh cut fluor, mky wh res ring under U. V. It, n res ring at nat lt. VPOS. CLAYSTONE: med dk gry, dk gry, mnr olv gry, occ med gry, ea, biky-sbbiky, srtab i/p, occ amor mod frm-frm, occ mod sft, stly i/p, micmic, micarb, n calc. SILTSTONE: med gry, med dk gry, ea, biky-sbbiky, amor, mod frm, micmic, miccarb, grad vf sst i/p, sli calc i/p. SAND: wh, 60% f, 40% vf, tr med qtz gr, hyal, trnsi, sbang-sbrnd, wl srted. SANDSTONE lt brnsh gry, lt gry, mnr v lt gry, med lt gry, f-vf qtz gr, hyal, sbang-sbrnd, wl srted, calc-arg mtrx i/p, calc cmt, fri-mod fri , loc ti, dry i/p, w/dk & gnsh mnrls incl, miccarb i/p, loc micmic, p-fr vis por. Fluor: NVOS, Tr pin point yel wh nat fluor, slw, fnt, fnt, even, lt yel wh cut fluor, mky wh res ring under U. V. It, n res ring at nat lt. VPOS. CLAYSTONE: olv gry, dk gry, mnr med dk gry, occ med gry, ea, sbbiky-biky, srtab i/p, loc amor, mod frm-frm, loc mod sft, stly i/p, micmic, miccarb, n-sli calc i/p.		
			TOTAL DEPTH: 8198 ft. MD (RT), 4491.9 ft. TVD (RT)					

STRATIGRAPHIC SEQUENCE

WELL: LO6-30D

The Stratigraphy Column expected in this well was the same according to correlations with the original prognosis, consists of the following Formations and Members: Helico, Lobitos, Terebratula, Chacra, Rio Bravo of Tertiary-Eocene age.

TGT LAB started logging into Talara Formation at 460 feet to the total depth on Rio Bravo at 8198 feet MD.

CENOZOIC

TERTIARY

TALARA FORMATION

HELICO MEMBER

Interval: 0 to 757 feet

The lithology at the upper section was conformed predominantly by Sand, Sandstone and Claystone.

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

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

Claystone: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, slightly calcareous.

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

Sand: white (N9), occasionally light gray, 50% fine, 40% medium, 10% coarse, traces very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted, with lithics dark and greenish.

Sandstone: medium dark gray, minor medium gray, occasionally light gray, very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show.

Claystone: olive gray, locally olive black, earthy, blocky to subblocky, minor sub tabular, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous in part, slightly calcareous.

Accessories: calcite, dolomite.

LOBITOS MEMBER

Interval: 757 to 2855 feet

The lithology in this member was conformed mainly by Claystone with small intercalations Sandstone, Sand and Dolomite.

At the upper section:

Claystone: olive black, olive gray, earthy, blocky to subblocky, minor sub tabular, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous in part, occasionally with disseminated pyrite, slightly calcareous.

Sandstone: medium dark gray, minor medium gray, occasionally light gray, very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show.

Sand: white, 60% medium, 30% fine, 10% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with lithics dark and greenish.

At the middle section:

Claystone: olive black, olive gray, occasionally medium dark gray, earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrritic in part, very slightly calcareous.

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

Dolomite: dark yellowish brown, occasionally brownish gray, massive, subblocky, hard to moderately hard, irregular fracture.

At the lower section:

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

Dolomite: dark yellowish brown, occasionally brownish gray, massive, subblocky to sublaminar, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part.

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

TEREBRATULA MEMBER

Interval: 2855 to 3120 feet

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

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

Sandstone: medium gray, medium dark gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity.

Fluorescence: NVOS, Traces to 20% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. V-POS.

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

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

Sand: white, 80% very fine to fine, 20% medium, grain, hyaline, translucent, subangular to subrounded, fair sorted.

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

Sandstone: medium gray, medium dark gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity.

Fluorescence: NVOS, Traces - 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.

Accessories: calcite, coal, pyrite.

CHACRA FORMATION

Interval: 3120 to 5816 feet

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

At the upper section:

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

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

At the middle section:

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

Sandstone: light gray, medium light gray, very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, micromicaceous in part, poor visual porosity.

Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, crush, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.

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

At the lower section:

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

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

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

LIMESTONE: dusky yellowish brown, dark yellowish brown, occasionally olive black, massive, subblocky to blocky, sub tabular in part, locally sublaminar, hard to moderately hard, irregular fracture, micritic in part, occasionally microcarbonaceous.

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

RIO BRAVO FORMATION

Interval: 5816 to 8198 feet

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

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

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

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

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

Fluorescence: NVOS, Traces to 20% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. V-POS.

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

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

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

Sandstone: very light gray, light gray, fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair visual porosity.

Fluorescence: NVOS, Traces to 30% pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. P-FOS.

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

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

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

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

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

Sandstone: light gray, light brownish gray, minor very light gray, medium light gray, fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity.



Fluorescence: NVOS, 30% to Traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. P-FOS.

Accessories: calcite, pyrite, coal, glauconite, slickenside.

LITHOLOGICAL DESCRIPTION

WELL: LO6-30D

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
Started logging & Monitoring Data from 460 feet on March 05th, 2014 In Talara Sandstone Mbr. (Talara Fm.) Drilled cement from 445 to 460 feet with sea water.			
460 – 465	40	CLAYSTONE: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately firm, micromicaceous, microcarbonaceous, slightly calcareous.	
	40	SANDSTONE: medium dark gray (N4), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show.	
	20	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. NOTE: SAMPLE CONTAMINATED WITH 80% CEMENT. Accessories: calcite.	
460 – 490	40	SAND: white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	30	CLAYSTONE: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, slightly calcareous.	
	30	SANDSTONE: medium dark gray (N4), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. NOTE: SAMPLE CONTAMINATED TRACES CEMENT. Accessories: calcite, dolomite.	
490 – 520	40	SAND: white (N9), 70% fine, 30% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	30	CLAYSTONE: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, slightly calcareous.	
	30	SANDSTONE: medium dark gray (N4), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. NOTE: SAMPLE CONTAMINATED TRACES CEMENT. Accessories: calcite, dolomite.	
520 – 550	40	SANDSTONE: medium dark gray (N4), locally medium gray (N5),	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30 30	very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. SAND: white (N9), 60% fine, 40% very fine, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, slightly calcareous. NOTE: SAMPLE CONTAMINATED TRACES CEMENT. Accessories: calcite.	
550 – 580	50 30 20	CLAYSTONE: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, slightly calcareous. SAND: white (N9), 60% fine, 40% very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: medium dark gray (N4), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. NOTE: SAMPLE CONTAMINATED TRACES CEMENT. Accessories: calcite.	
580 – 610	50 30 20	SAND: white (N9), 50% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. CLAYSTONE: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: medium dark gray (N4), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. NOTE: SAMPLE CONTAMINATED TRACES CEMENT. Accessories: calcite.	
610 – 640	40 30 30	SAND: white (N9), 40% fine, 30% very fine, 30% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. CLAYSTONE: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, occasionally amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: medium dark gray (N4), locally medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		moderately friable to moderately consolidated, locally tight, with dark minerals inclusion, poor visual porosity. No Oil Show. NOTE: SAMPLE CONTAMINATED TRACES CEMENT. Accessories: calcite, dolomite.	
640 – 670	60 30 10	SAND: white (N9), 50% fine, 40% medium, 10% coarse, traces very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted, with lithics dark and greenish. SANDSTONE: medium dark gray (N4), minor medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. CLAYSTONE: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, minor sub tabular, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous in part, slightly calcareous. Accessories: calcite, dolomite.	
670 – 700	40 40 20	SAND: white (N9), occasionally light gray, 60% fine, 30% medium, 10% coarse, traces very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted, with lithics dark and greenish. SANDSTONE: medium dark gray (N4), minor medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. CLAYSTONE: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, minor sub tabular, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous in part, slightly calcareous. Accessories: calcite, dolomite.	
700 – 730	50 40 10	SAND: white (N9), occasionally light gray, 50% fine, 40% medium, 10% coarse, traces very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted, with lithics dark and greenish. SANDSTONE: medium dark gray (N4), minor medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. CLAYSTONE: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, minor sub tabular, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous in part, occasionally with disseminated pyrite, slightly calcareous. Accessories: calcite, dolomite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
LOBITOS Mbr. (TALARA FM.) TOP. AT 757.00 ft. MD (RT); 702.25 ft. TVD (RT)			
730 – 760	60	SAND: white (N9), occasionally light gray, 50% fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted, with lithics dark and greenish.	
	30	SANDSTONE: medium dark gray (N4), minor medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show.	
	10	CLAYSTONE: olive gray (5Y 4/1), locally olive black (5Y 2/1), earthy, blocky to subblocky, minor sub tabular, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous in part, occasionally with disseminated pyrite, slightly calcareous. Accessories: calcite, dolomite.	
760 – 790	60	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), earthy, blocky to subblocky, minor sub tabular, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous in part, occasionally with disseminated pyrite, slightly calcareous.	
	20	SAND: white (N9), occasionally light gray, 60% fine, 30% medium, 10% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with lithics dark and greenish.	
	20	SANDSTONE: medium dark gray (N4), minor medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, coal.	
790 – 820	60	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), earthy, blocky to subblocky, minor sub tabular, occasionally amorphous, moderately firm to moderately soft, micromicaceous, microcarbonaceous in part, occasionally with disseminated pyrite, slightly calcareous.	
	20	SAND: white (N9), occasionally light gray, 60% fine, 30% medium, 10% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with lithics dark and greenish.	
	20	SANDSTONE: medium dark gray (N4), minor medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, coal.	
820 – 850	100	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), earthy, blocky to subblocky, minor sub tabular, occasionally amorphous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	moderately firm to firm, micromicaceous, microcarbonaceous in part, slightly calcareous. SANDSTONE: medium dark gray (N4), minor medium gray (N5), occasionally light gray (N7), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite.	
850 – 880	100	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), earthy, blocky to subblocky, minor sub tabular, occasionally amorphous, moderately firm to firm, micromicaceous, microcarbonaceous in part, slightly calcareous. Accessories: calcite, coal.	
880 – 910	100	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), earthy, blocky to subblocky, minor sub tabular, occasionally amorphous, moderately firm to firm, micromicaceous, microcarbonaceous in part, slightly calcareous. Accessories: calcite, coal.	
910 – 940	100	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to firm, micromicaceous, microcarbonaceous in part, slightly calcareous. Accessories: calcite, coal.	
940 – 970	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to firm, micromicaceous, microcarbonaceous in part, slightly calcareous. SANDSTONE: medium dark gray (N4), minor medium gray (N5), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, bentonite, coal.	
970 – 1000	80 10 10	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous, microcarbonaceous in part, slightly calcareous. SAND: white (N9), 60% medium, 30% fine, 10% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with lithics dark and greenish. SANDSTONE: medium dark gray (N4), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, bentonite, coal.	
1000 – 1030	90 10	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous, microcarbonaceous in part, slightly calcareous. SANDSTONE: medium dark gray (N4), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, bentonite, coal.	
1030 – 1060	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, slightly calcareous. SANDSTONE: medium dark gray (N4), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, bentonite, coal.	
1060 – 1090	90 10	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, slightly calcareous. SANDSTONE: medium dark gray (N4), minor medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, bentonite.	
1090 – 1120	80 20	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	SAND: white (N9), 60% medium, 30% fine, 10% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with lithics dark and greenish. Accessories: calcite, dolomite, pyrite, coal.	
1120 – 1150	90	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous.	
	10	SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, pyrite, coal.	
1150 – 1180	90	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous.	
	10	SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, pyrite, coal.	
1180 – 1210	90	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally brownish black (5YR 2/1), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous.	
	10	SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 50% fine, 40% medium, 10% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with lithics dark and greenish. Accessories: calcite, dolomite, microfossils.	
1210 – 1240	70	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous.	
	20	SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1),	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. SAND: white (N9), 60% fine, 30% medium, 10% very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, with lithics dark and greenish. Accessories: calcite, dolomite, glauconite, microfossils.	
1240 – 1270	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, microfossils.	
1270 – 1300	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, microfossils.	
1300 – 1330	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally sub tabular, occasionally amorphous, moderately firm to moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, with pyrite disseminate in part, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1330 – 1360	100	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, sub tabular in part, occasionally amorphous, moderately firm to moderately soft,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	occasionally silty, micromicaceous in part, locally microcarbonaceous, with pyrite disseminate in part, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, bentonite.	
1360 – 1390	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, sub tabular in part, occasionally amorphous, moderately firm to moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, with pyrite disseminate in part, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and greenish minerals inclusion, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, bentonite.	
1390 – 1420	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, sub tabular in part, occasionally amorphous, moderately firm to moderately soft, locally soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, with pyrite disseminate in part, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, microfossils.	
1420 – 1450	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, sub tabular in part, occasionally amorphous, moderately firm to moderately soft, locally soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, dolomite, pyrite, microfossils.	
1450 – 1480	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, sub tabular in part, occasionally amorphous, moderately firm to moderately soft, locally soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1480 – 1510	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, sub tabular in part, occasionally amorphous, moderately firm to moderately soft, locally soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1510 – 1540	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrritic in part, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1540 – 1570	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrritic in part, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1570 – 1600	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrictic in part, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1600 – 1630	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrictic in part, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1630 – 1660	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrictic in part, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1660 – 1690	100	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrictic in part, very slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1690 – 1720	100 Tr	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), occasionally dark greenish gray (5GY 4/1), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrritic in part, very slightly calcareous. SANDSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1720 – 1750	90 10	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrritic in part, very slightly calcareous. SANDSTONE: medium gray (N5), medium dark gray (N4), , very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and glauconite inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1750 – 1780	80 20	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrritic in part, very slightly calcareous. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
1780 – 1810	80	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrictic in part, very slightly calcareous. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark inclusions, micromicaceous in part, poor visual porosity. No Oil Show.	
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky, hard to moderately hard, irregular fracture. Accessories: calcite, dolomite.	
1810 – 1840	90	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrictic in part, very slightly calcareous.	
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky, hard to moderately hard, irregular fracture.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite.	
1840 – 1870	90	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrictic in part, very slightly calcareous.	
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky, hard to moderately hard, irregular fracture.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite.	
1870 – 1900	90	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, micropyrictic in part, very slightly calcareous.	
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky, hard to moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	hard, irregular fracture. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite.	
1900 – 1930	90	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous.	
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky, hard to moderately hard, irregular fracture.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite.	
1930 – 1960	90	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous.	
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky, hard to moderately hard, irregular fracture.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite	
1960 – 1990	90	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous.	
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky, hard to moderately hard, irregular fracture.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), , very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		moderately consolidated to moderately friable, locally tight, dirty in part, with dark inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite.	
1990 – 2020	90	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), occasionally medium dark gray (N4), earthy, blocky to subblocky, locally tabular, occasionally amorphous, moderately firm to firm, locally moderately soft, occasionally silty, micromicaceous in part, locally microcarbonaceous, very slightly calcareous.	
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky, hard to moderately hard, irregular fracture.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite.	
2020 – 2050	90	CLAYSTONE: medium dark gray (N4), locally olive black (5Y 2/1), occasionally olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminae, moderately firm, locally moderately soft, locally silty, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky, hard to moderately hard, irregular fracture.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite.	
2050 – 2080	90	CLAYSTONE: medium dark gray (N4), locally olive black (5Y 2/1), occasionally olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular to sublaminae, moderately firm, locally moderately soft, locally silty, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky, hard to moderately hard, irregular fracture.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark inclusions, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
2080 – 2110	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous in part, slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, limestone.	
2110 – 2140	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous in part, slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	
2140 – 2170	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally silty, micromicaceous, microcarbonaceous in part, slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	
2170 – 2200	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, occasionally firm, locally silty, micromicaceous, microcarbonaceous in part, slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	
2200 – 2230	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to, firm, locally moderately soft, locally silty, micromicaceous, microcarbonaceous in part, slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	
2230 – 2260	100	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, occasionally firm, silty in part, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	microcarbonaceous in part, slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	
2260 – 2290	100	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublamellar, amorphous, moderately soft to moderately firm, occasionally firm, silty in part, micromicaceous, microcarbonaceous in part, slightly calcareous.	
	Tr	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part.	
	Tr	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous in part, occasionally microcarbonaceous, poor visual porosity. No Oil Show. Accessories: calcite, limestone, coal.	
2290 – 2320	90	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublamellar, amorphous, moderately firm to moderately soft, occasionally firm, silty in part, micromicaceous, microcarbonaceous in part, slightly calcareous.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous in part, occasionally microcarbonaceous, poor visual porosity. No Oil Show.	
	Tr	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, limestone, coal.	
2320 – 2350	90	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublamellar, amorphous, moderately firm to moderately soft, occasionally firm, silty in part, micromicaceous, microcarbonaceous in part, slightly calcareous.	
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part.	
	Tr	SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous in part, occasionally microcarbonaceous, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, limestone, coal.	
2350 – 2380	100 Tr Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately soft to moderately firm, occasionally firm, silty in part, micromicaceous, microcarbonaceous in part, occasionally slightly calcareous. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous in part, occasionally microcarbonaceous, poor visual porosity. No Oil Show. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, limestone, coal.	
2380 – 2410	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately soft to moderately firm, occasionally firm, silty in part, micromicaceous, microcarbonaceous in part, occasionally slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, coal.	
2410 – 2440	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately soft to moderately firm, occasionally firm, silty in part, micromicaceous, microcarbonaceous in part, occasionally slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, coal.	
2440 – 2470	90 10 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately soft to moderately firm, occasionally firm, silty in part, micromicaceous, microcarbonaceous in part, occasionally slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous in part, occasionally microcarbonaceous, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, coal.	
2470 - 2500	90 10 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally olive black (5Y 2/1), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately soft to moderately firm, occasionally firm, silty in part, micromicaceous, microcarbonaceous in part, occasionally slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally tight, dirty in part, with dark minerals inclusions, micromicaceous in part, occasionally microcarbonaceous, poor visual porosity. No Oil Show. Accessories: calcite, coal.	
2500 – 2530	90 10	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally olive black (5Y 2/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous in part, occasionally slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to sublaminae, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, pyrite, coal.	
2530 – 2560	90 10	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally olive black (5Y 2/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous in part, occasionally slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to sublaminae, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, pyrite, coal.	
2560 – 2590	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally olive black (5Y 2/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous in part, occasionally slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to sublaminae, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, pyrite, coal.	
2590 – 2620	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally olive black (5Y 2/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous in part, occasionally slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to sublaminae, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, coal.	
2620 – 2650	90 10	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), occasionally olive black (5Y 2/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous in part, occasionally slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to sublaminae, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, coal.	
2650 – 2680	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous in part, slightly calcareous in part. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to sublaminae, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, coal.	
2680 – 2710	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous in part, slightly calcareous in part. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to sublaminae, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, coal.	
2710 – 2740	90	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous in part, slightly calcareous in part.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to sublaminar, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, coal.	
2740 – 2770	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminar, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous in part, slightly calcareous in part. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to sublaminar, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, coal.	
2770 – 2800	100 Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminar, amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous in part, slightly calcareous in part. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to sublaminar, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, coal.	
2800 – 2830	100 Tr Tr	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminar, amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous in part, slightly calcareous in part. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to sublaminar, occasionally blocky, hard to moderately hard, irregular fracture, microcarbonaceous in part. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, dirty in part, with dark minerals inclusions, micromicaceous in part, occasionally microcarbonaceous, poor visual porosity. No Oil Show. Accessories: calcite, coal.	
		TEREBRATULA Mbr. (TALARA FM.) TOP. AT 2855.00 ft. MD (RT); 2014ft. TVD (RT)	
2830 – 2860	80 10	CLAYSTONE: medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminar, amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous in part, slightly calcareous in part. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. SANDSTONE: medium light gray (N6), light gray (N7), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, dirty in part, with dark minerals inclusions, micromicaceous in part, occasionally microcarbonaceous, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, crush to slow, weak, pale, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.	TR
	Tr	SAND: white (N9), fine to very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
2860 – 2890	50	SAND: white (N9), 70% very fine to fine, 30% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	5
	40	CLAYSTONE: medium dark gray (N4), minor olive black (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	10	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.	
	Tr	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite	
2890 – 2920	50	SAND: white (N9), 70% very fine to fine, 30% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	10
	30	CLAYSTONE: medium dark gray (N4), minor olive black (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	20	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	Fluorescence: NVOS, 10% pin point pale yellow natural fluorescence, crush, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminar, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, pyrite.	
2920 – 2950	40 30 30 Tr	SAND: white (N9), 80% very fine to fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. CLAYSTONE: medium dark gray (N4), minor olive black (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminar, amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. Fluorescence: NVOS, 20% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminar, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	20
2950 – 2980	60 30 10 Tr	CLAYSTONE: medium dark gray (N4), minor olive black (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminar, amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. SAND: white (N9), 80% very fine to fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	
2980 – 3010	80	CLAYSTONE: medium dark gray (N4), minor olive black (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	TR
	10	SAND: white (N9), 80% very fine to fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	
	10	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.	
	Tr	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	
3010 – 3040	50	CLAYSTONE: medium dark gray (N4), minor olive black (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	5
	40	SAND: white (N9), 80% very fine to fine, 20% medium, grain, hyaline, translucent, subangular to subrounded, fair sorted.	
	10	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.	
	Tr	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	
3040 – 3070	60	CLAYSTONE: medium dark gray (N4), minor olive black (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30 10 Tr	occasionally sublaminae, amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. SAND: white (N9), 80% very fine to fine, 20% medium, grain, hyaline, translucent, subangular to subrounded, fair sorted. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	TR
3070 – 3100	60 20 20 Tr	CLAYSTONE: medium dark gray (N4), minor olive black (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. SAND: white (N9), 80% very fine to fine, 20% medium, grain, hyaline, translucent, subangular to subrounded, fair sorted. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	TR
3100 – 3130	80 10 10	CLAYSTONE: medium dark gray (N4), minor olive black (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous. SAND: white (N9), very fine to fine, grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded,	NOS

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	
		CHACRA FM. TOP. AT 3120.00 ft. MD (RT); 2123.16 ft. TVD (RT)	
3130 – 3160	100 Tr Tr	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, slightly calcareous. SAND: white (N9), very fine to fine, grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
3160 – 3190	100 Tr Tr	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, slightly calcareous. SAND: white (N9), very fine to fine, grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
3190 – 3220	100 Tr	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
3220 – 3250	100 Tr	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, slightly calcareous. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
3250 – 3280	100 Tr	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), dark gray (N3), earthy, blocky to subblocky, locally tabular, occasionally sublaminae, amorphous, moderately firm to firm, micromicaceous, microcarbonaceous, very slightly calcareous. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: dolomite, calcite.	
3280 – 3310	100 Tr	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally tabular, occasionally sublaminae, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, very slightly calcareous. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: dolomite, calcite.	
3310 – 3340	100 Tr Tr	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, very slightly calcareous. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous. Accessories: calcite, dolomite.	
3340 – 3370	90 10	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally tabular, occasionally sublaminae, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, very slightly calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	sandstone, slightly calcareous. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
3370 – 3400	90	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally tabular, occasionally sublaminae, amorphous, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, very slightly calcareous.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, glauconite.	
3400 – 3430	100	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, very slightly calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: dolomite, calcite.	
3430 – 3460	100	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, very slightly calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite.	
3460 – 3490	90	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, very slightly calcareous.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, limestone.	
3490 – 3520	100	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), minor olive gray (5Y 4/1), dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, occasionally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), 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 inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, limestone.	
3520 – 3550	100	CLAYSTONE: olive black (5Y 2/1), medium dark gray (N4), minor olive gray (5Y 4/1), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to moderately soft, occasionally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal, limestone.	
3550 – 3580	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), dark gray (N4), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, locally moderately soft, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous to occasionally slightly calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, coal, limestone.	
3580 – 3610	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), dark gray (N4), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, locally moderately soft, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal, limestone.	
3610 – 3640	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), dark gray (N4), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, locally moderately soft, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	calcareous to occasionally slightly calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous. Accessories: calcite, dolomite, coal, limestone.	
3640 – 3670	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), dark gray (N4), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, locally moderately soft, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium dark gray (N4), 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 inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal, limestone.	
3670 – 3700	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), dark gray (N4), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, amorphous, moderately firm to firm, locally moderately soft, silty in part, occasionally with coal inclusions, micromicaceous, microcarbonaceous, non calcareous to occasionally slightly calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous.	
	Tr	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, coal, limestone.	
3700 – 3730	100	CLAYSTONE: olive black (5Y 2/1), olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous.	
	Tr	DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminae, hard to moderately hard, irregular fracture,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous in part. Accessories: calcite, coal.	
3730 – 3760	100 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, slightly calcareous. Accessories: dolomite, calcite.	
3760 – 3790	100 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, calcareous. Accessories: dolomite, calcite.	
3790 – 3820	100 Tr	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, occasionally locally subtabular, occasionally sublaminae, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, occasionally grading to very fine sandstone, calcareous. Accessories: dolomite, calcite.	
3820 – 3850	90 10	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, occasionally locally subtabular, occasionally sublaminae, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone, calcareous. Accessories: dolomite, calcite.	
3850 – 3880	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, occasionally locally subtabular, occasionally sublaminae, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone, calcareous. Accessories: dolomite, calcite.	
3880 – 3910	100 Tr	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, occasionally locally subtabular, occasionally sublaminal, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone, calcareous. Accessories: dolomite, calcite, limestone.	
3910 – 3940	100 Tr	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: dolomite, calcite, limestone.	
3940 – 3970	100 Tr Tr	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. DOLOMITE: dark yellowish brown (10YR 4/2), occasionally brownish gray (5YR 4/1), massive, subblocky to blocky, minor sublaminal, hard to moderately hard, irregular fracture, microcarbonaceous in part. Accessories: calcite, limestone.	
3970 – 4000	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, dolomite, coal, limestone.	
4000 – 4030	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor dark gray (N3), occasionally olive gray (5Y 4/1), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, dolomite, limestone.	
4030 – 4060	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, dolomite, limestone.	
4060 – 4090	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, dolomite, limestone.	
4090 – 4120	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, dolomite, glauconite, limestone.	
4120 – 4150	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, silty in part, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	microcarbonaceous, non calcareous to slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, dolomite, limestone.	
4150 – 4180	100 Tr	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, dolomite, limestone.	
4180 – 4210	100 Tr	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, dolomite, limestone.	
4210 – 4240	100 Tr	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, dolomite, limestone.	
4240 – 4270	100 Tr	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, dolomite, limestone.	
4270 – 4300	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, limestone.	
4300 – 4330	100 Tr Tr	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: medium gray (N5), medium dark gray (N4), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to moderately consolidated, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, limestone.	
4330 – 4360	70 20 10 Tr	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. 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, occasionally tight, with dark and greenish minerals inclusions, micromicaceous in part, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, crush, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. SAND: white (N9), fine to very fine, traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, limestone, coal.	TR
4360 – 4390	80	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	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 consolidated to moderately friable, occasionally tight, with dark and greenish minerals inclusions, micromicaceous in part, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, crush, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.	TR
	10	SAND: white (N9), 90% fine to very 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, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, limestone, coal.	
4390 – 4420	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	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 consolidated to moderately friable, occasionally tight, with dark and greenish minerals inclusions, micromicaceous in part, poor visual porosity. No Oil Show.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, limestone, coal.	
4420 – 4450	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	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 consolidated to moderately friable, occasionally tight, with dark and greenish minerals inclusions, micromicaceous in part, poor visual porosity. No Oil Show.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, limestone, coal.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
4450 – 4480	100	CLAYSTONE: medium dark gray (N4), olive black (5Y 2/1), minor olive gray (5Y 4/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	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 consolidated to moderately friable, occasionally tight, with dark and greenish minerals inclusions, micromicaceous in part, poor visual porosity. No Oil Show.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: dolomite, calcite.	
4480 – 4510	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive black (5Y 2/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	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 consolidated to moderately friable, occasionally tight, with dark and greenish minerals inclusions, micromicaceous in part, poor visual porosity. No Oil Show.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: dolomite, calcite.	
4510 – 4540	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive black (5Y 2/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	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 consolidated to moderately friable, occasionally tight, with dark and greenish minerals inclusions, micromicaceous in part, poor visual porosity. No Oil Show.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: dolomite, calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
4540 – 4570	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive black (5Y 2/1), occasionally dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, locally firm, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	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 consolidated to moderately friable, occasionally tight, with dark and greenish minerals inclusions, micromicaceous in part, poor visual porosity. No Oil Show.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite.	
4570 – 4600	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, subtabular in part, occasionally sublaminae, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, coal.	
4600 – 4630	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite.	
4630 – 4660	100	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite.	
4660 – 4690	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	occasionally sublaminal, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: dolomite, calcite.	
4690 – 4720	100 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: dolomite, calcite.	
4720 – 4750	100 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite.	
4750 – 4780	100 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite.	
4780 – 4810	100 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: dolomite, calcite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
4810 – 4840	100 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: dolomite, calcite.	
4840 – 4870	100 Tr Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: medium gray (N5), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
4870 – 4900	100 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite.	
4900 – 4930	100 Tr Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminal, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, dolomite.	
4930 – 4960	90 10 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite.	
4960 – 4990	100 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally sublaminae, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, coal.	
4990 – 5020	100 Tr	CLAYSTONE: olive gray (5Y 4/1), olive black (5Y 2/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, coal.	
5020 – 5050	100 Tr Tr	CLAYSTONE: olive gray (5Y 4/1), olive black (5Y 2/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal.	
5050 – 5080	90	CLAYSTONE: olive gray (5Y 4/1), olive black (5Y 2/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	Tr	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal.	
5080 – 5110	100	CLAYSTONE: olive gray (5Y 4/1), olive black (5Y 2/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	Tr	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal.	
5110 – 5140	100	CLAYSTONE: olive gray (5Y 4/1), olive black (5Y 2/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	Tr	SANDSTONE: medium gray (N5), medium light gray (N6), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, with dark minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, dolomite, coal.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
5140 – 5170	100 Tr	CLAYSTONE: olive gray (5Y 4/1), olive black (5Y 2/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, coal.	
5170 – 5200	100 Tr	CLAYSTONE: olive gray (5Y 4/1), olive black (5Y 2/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, limestone.	
5200 – 5230	100 Tr	CLAYSTONE: olive gray (5Y 4/1), olive black (5Y 2/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, limestone.	
5230 – 5260	100 Tr	CLAYSTONE: olive gray (5Y 4/1), olive black (5Y 2/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, limestone.	
5260 – 5290	100 Tr	CLAYSTONE: olive gray (5Y 4/1), olive black (5Y 2/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite, dolomite.	
5290 – 5320	100 Tr	CLAYSTONE: olive gray (5Y 4/1), olive black (5Y 2/1), medium dark gray (N4), minor dark gray (N3), earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous to slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, subtabular, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite, limestone.	
5320 – 5350	90 10 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. LIMESTONE: dusky yellowish brown (10YR 2/2), dark yellowish brown (10 YR 4/2), occasionally olive black (5Y 2/1), massive, subblocky to blocky, sub tabular in part, locally sublaminar, hard to moderately hard, irregular fracture, micritic in part, occasionally microcarbonaceous. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous in part, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, dolomite.	
5350 – 5380	80 10 10	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, occasionally micropyrictic, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous in part, microcarbonaceous, micropyrictic in part, grading to very fine sandstone in part, slightly calcareous in part. LIMESTONE: dusky yellowish brown (10YR 2/2), dark yellowish brown (10 YR 4/2), occasionally olive black (5Y 2/1), massive, subblocky to blocky, minor sublaminar, hard to moderately hard, irregular fracture, micritic in part, occasionally microcarbonaceous. Accessories: calcite, dolomite, pyrite.	
5380 – 5410	80 10	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, occasionally micropyrictic, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, micropyrictic in part, grading to very fine sandstone in part, slightly calcareous in part. LIMESTONE: dusky yellowish brown (10YR 2/2), dark yellowish brown (10 YR 4/2), occasionally olive black (5Y 2/1), massive, subblocky to blocky, sub tabular in part, locally sublaminar, hard to moderately hard, irregular fracture, micritic in part, occasionally microcarbonaceous. Accessories: calcite, dolomite, pyrite.	
5410 – 5440	90	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, occasionally micropyrictic, slightly calcareous in part.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, micropyrictic in part, grading to very fine sandstone in part, slightly calcareous in part.	
	Tr	LIMESTONE: dusky yellowish brown (10YR 2/2), dark yellowish brown (10 YR 4/2), occasionally olive black (5Y 2/1), massive, subblocky to blocky, sub tabular in part, locally sublaminar, hard to moderately hard, irregular fracture, micritic in part, occasionally microcarbonaceous. Accessories: calcite, dolomite.	
5440 – 5470	90	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, occasionally micropyrictic, slightly calcareous in part.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, micropyrictic in part, grading to very fine sandstone in part, slightly calcareous.	
	Tr	LIMESTONE: dusky yellowish brown (10YR 2/2), dark yellowish brown (10 YR 4/2), occasionally olive black (5Y 2/1), massive, subblocky to blocky, sub tabular in part, locally sublaminar, hard to moderately hard, irregular fracture, micritic in part, occasionally microcarbonaceous. Accessories: calcite, dolomite, coal.	
5470 – 5500	80	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, occasionally micropyrictic, slightly calcareous in part.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	microcarbonaceous, micropyrritic in part, grading to very fine sandstone in part, slightly calcareous. LIMESTONE: dusky yellowish brown (10YR 2/2), dark yellowish brown (10 YR 4/2), occasionally olive black (5Y 2/1), massive, subblocky to blocky, sub tabular in part, locally sublaminar, hard to moderately hard, irregular fracture, micritic in part, occasionally microcarbonaceous. Accessories: calcite, dolomite, coal.	
5500 – 5530	90	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, occasionally micropyrritic, slightly calcareous in part.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, micropyrritic in part, grading to very fine sandstone in part, slightly calcareous.	
	Tr	LIMESTONE: dusky yellowish brown (10YR 2/2), dark yellowish brown (10 YR 4/2), occasionally olive black (5Y 2/1), massive, subblocky to blocky, sub tabular in part, locally sublaminar, hard to moderately hard, irregular fracture, micritic in part, occasionally microcarbonaceous. Accessories: calcite, dolomite, coal.	
5530 – 5560	80	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, occasionally micropyrritic, slightly calcareous in part.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, micropyrritic in part, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium light gray (N6), very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, occasionally tight, with dark minerals inclusions, microcarbonaceous, micromicaceous in part, poor visual porosity. No Oil Show.	
	Tr	LIMESTONE: dusky yellowish brown (10YR 2/2), dark yellowish brown (10 YR 4/2), occasionally olive black (5Y 2/1), massive, subblocky to blocky, sub tabular in part, locally sublaminar, hard to moderately hard, irregular fracture, micritic in part, occasionally microcarbonaceous. Accessories: calcite, dolomite, coal.	
5560 – 5590	70	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 10	firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, occasionally micropyrritic, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, micropyrritic in part, grading to very fine sandstone in part, slightly calcareous. SANDSTONE: medium gray (N5), medium light gray (N6), very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, occasionally tight, with dark minerals inclusions, microcarbonaceous, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, limestone, dolomite, coal.	
5590 – 5620	90 10 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, occasionally micropyrritic, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, micropyrritic in part, grading to very fine sandstone in part, slightly calcareous. SANDSTONE: medium gray (N5), medium light gray (N6), very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, occasionally tight, with dark minerals inclusions, microcarbonaceous, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, limestone, dolomite, coal.	
5620 – 5650	90 10 Tr	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, occasionally micropyrritic, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, micropyrritic in part, grading to very fine sandstone in part, slightly calcareous. SANDSTONE: medium gray (N5), medium light gray (N6), very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable, occasionally tight, with dark minerals inclusions, microcarbonaceous, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, limestone, dolomite, coal.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
5650 – 5680	90	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray, earthy, blocky to subblocky, locally subtabular, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, occasionally micropyrritic, slightly calcareous in part.	
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, micropyrritic in part, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium light gray (N6), very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusions, microcarbonaceous, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite, limestone, dolomite, coal.	
5680 – 5690	80	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite. Note: sample contaminated with traces cement and shaving metal.	
5690 – 5700	50	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	
	30	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	SANDSTONE: medium gray (N5), medium light gray (N6), very fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusions, microcarbonaceous, micromicaceous in part, poor visual porosity. No Oil Show. Accessories: calcite.	
5700 – 5710	70	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	
	20	SANDSTONE: medium gray (N5), medium light gray (N6), very fine	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	quartz grain, hyaline, translucent, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to moderately consolidated, occasionally tight, with dark minerals inclusions, microcarbonaceous, micromicaceous in part, poor visual porosity. No Oil Show. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite.	
5710 – 5720	60 30 10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite.	
5720 – 5730	60 30 10 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite.	
5730 – 5740	80 20 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. SAND: white (N9), very fine to fine quartz grain, hyaline,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		translucent, subangular to subrounded, well sorted. Accessories: calcite.	
5740 – 5750	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	
	20	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite.	
5750 – 5760	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
5760 – 5770	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	
	20	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
5770 – 5780	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 Tr	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
5780 – 5790	80 20 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
5790 – 5800	100 Tr Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
5800 – 5810	80 20 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
RIO BRAVO FM. TOP. AT 5816.00 ft. MD (RT); 243.5 ft. TVD (RT)			
5810 – 5820	100	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	TR
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	Tr	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	
5820 – 5830	50	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	5
	40	SAND: white (N9), 50% medium, 40% very fine to fine, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	10	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	
5830 – 5840	40	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	
	40	SAND: white (N9), 50% medium, 30% very fine to fine, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	5
5840 – 5850	40	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	30
	40	SAND: white (N9), 50% medium, 30% very fine to fine, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	20	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, 30% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	
5850 – 5860	50	SAND: white (N9), 50% medium, 30% very fine to fine, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	20
	30	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, 20% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.	
	20	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite, coal.	
5860 – 5870	60	SAND: white (N9), 40% medium, 40% very fine to fine, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	20

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, 20% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.	
	10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite, coal.	
5870 – 5880	50	SAND: white (N9), 50% medium, 30% very fine to fine, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	30	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, 10% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.	10
	20	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite, coal.	
5880 – 5890	60	SAND: white (N9), 50% medium, 40% very fine to fine, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	30	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.	5
	10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous, slightly calcareous in part. Accessories: calcite, coal.	
5890 – 5900	40	SAND: white (N9), 40% medium, 40% very fine to fine, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	5
	40	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity.	
	20	Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite, coal.	
5900 – 5910	60	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	TR
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	10	SAND: white (N9), 40% medium, 40% very fine to fine, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted.	
	10	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	
5910 – 5920	60	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 10	microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. SAND: white (N9), 40% medium, 40% very fine to fine, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, poor sorted. SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	TR
5920 – 5930	70 20 10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	TR
5930 – 5940	80 20	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, coal.	NOS
5940 – 5950	70	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	10	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
5950 – 5960	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
5960 – 5970	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
5970 – 5980	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
5980 – 5990	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
5990 – 6000	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal.	
6000 – 6010	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	TR
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	10	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	
6010 – 6020	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	TR
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	10	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	
6020 – 6030	70	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	TR
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	10	SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	
6030 – 6040	70	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	TR
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	10	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, coal.	
6040 – 6050	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 10	subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Accessories: calcite, coal.	NOS
6050 – 6060	90 10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, coal, pyrite.	NOS
6060 – 6070	90 10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, coal, pyrite.	NOS
6070 – 6080	80 10 10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. SAND: white (N9), very fine to fine quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, coal, pyrite.	
6080 – 6090	90 10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, coal, pyrite.	NOS
6090 – 6100	90 10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite, coal, pyrite.	NOS
6110 – 6110	80 10 10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, coal, pyrite.	NOS
6110 – 6120	80 10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	NOS

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, coal, pyrite.	
6120 – 6130	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite, coal.	
6130 – 6140	70	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	10	SANDSTONE: light gray (N7), locally medium light gray (N6), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. Accessories: calcite.	
6140 – 6150	50	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS
	30	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	20	SANDSTONE: medium gray (N5), medium light gray (N6), very fine, minor fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, locally dirty, with	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		dark and greenish minerals inclusions, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	
6150 – 6160	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium light gray (N6), very fine, minor fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, locally dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	
6160 – 6170	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS
	20	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous.	
	Tr	SANDSTONE: medium gray (N5), medium light gray (N6), very fine, minor fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, tight in part, locally dirty, with dark and greenish minerals inclusions, poor visual porosity. No Oil Show. Accessories: pyrite, calcite.	
6170 – 6180	30	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	NOS
	30	SANDSTONE: light gray (N7), very light gray (N8), occasionally medium gray (N5), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to friable, occasionally moderately consolidate, tight in part, with dark and greenish minerals inclusions, fair to poor visual porosity. No Oil Show.	
	30	SAND: white (N9), 50% fine, 30% medium, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: pyrite, calcite.	
6180 – 6190	40	SANDSTONE: light gray (N7), very light gray (N8), occasionally medium gray (N5), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to friable, occasionally moderately consolidate, tight in part, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair to poor visual porosity. No Oil Show.	NOS
	40	SAND: white (N9), 50% fine to very fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part.	
	Tr	SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: pyrite, calcite.	
6190 – 6200	50	SAND: white (N9), 70% fine to very fine, 30% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	NOS
	30	SANDSTONE: light gray (N7), very light gray (N8), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair to poor visual porosity. No Oil Show.	
	20	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: pyrite, calcite.	
6200 – 6210	60	SAND: white (N9), 60% fine, 40% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	NOS
	30	SANDSTONE: light gray (N7), greenish gray (5G 6/1), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, micromicaceous in part, fair to poor visual porosity. No Oil Show.	
	10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite, pyrite.	
6210 – 6220	70 30 Tr	SAND: white (N9), 60% fine, 40% very fine, traces medium, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), greenish gray (5G 6/1), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, micromicaceous in part, fair to poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, yellowish white, residual ring under U. V. light, non residual ring at natural light. VPOS. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite, pyrite.	TR
6220 – 6230	80 20 Tr	SAND: white (N9), 80% fine to very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), greenish gray (5G 6/1), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, micromicaceous in part, fair to poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, yellowish white, residual ring under U. V. light, non residual ring at natural light. VPOS. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite, pyrite, glauconite.	TR
6230 – 6240	50 30	SAND: white (N9), 50% fine, 20% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), greenish gray (5G 6/1), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	micromicaceous in part, fair to poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, yellowish white, residual ring under U. V. light, non residual ring at natural light. VPOS. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite, pyrite, glauconite.	TR
6240 – 6250	50 30 20	SAND: white (N9), 50% fine, 30% medium, 20% very fine, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SANDSTONE: light gray (N7), very light gray (N8), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, micromicaceous in part, fair to poor visual porosity. No Oil Show. Accessories: calcite, pyrite.	NOS
6250 – 6260	80 20 Tr	SAND: white (N9), 70% fine to very fine, 30% medium traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), very light gray (N8), minor greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, micromicaceous in part, fair to poor visual porosity. No Oil Show. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite.	NOS
6260 – 6270	80 20	SAND: white (N9), 70% fine to very fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), very light gray (N8), minor greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous,	NOS

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	micromicaceous in part, fair to poor visual porosity. No Oil Show. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite.	
6270 – 6280	70 30 Tr	SAND: white (N9), 70% fine to very fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: very light gray (N8), light gray (N7), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair to poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, yellowish white, residual ring under U. V. light, non residual ring at natural light. VPOS. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite.	TR
6280 – 6290	70 30 Tr	SAND: white (N9), 80% fine to very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: very light gray (N8), light brownish gray (5YR 6/1), light gray (N7), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, abundant calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. No Oil Show. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite.	NOS
6290 – 6300	70 30	SAND: white (N9), 70% fine to very fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: very light gray (N8), light brownish gray (5YR 6/1), light gray (N7), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, abundant calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, yellowish white, residual ring under U. V. light, non residual ring at natural light. VPOS. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite.	TR
6300 – 6310	60 30 10	SAND: white (N9), 50% medium, 30% fine, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. SANDSTONE: very light gray (N8), light brownish gray (5YR 6/1), light gray (N7), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, abundant calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, yellowish white, residual ring under U. V. light, non residual ring at natural light. VPOS. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite.	TR
6310 – 6320	50 30 10 10	SAND: white (N9), 50% fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: very light gray (N8), light brownish gray (5YR 6/1), light gray (N7), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, abundant calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, yellowish white, residual ring under U. V. light, non residual ring at natural light. VPOS. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous,	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. Accessories: calcite.	
6320 – 6330	40 30 20 10	SANDSTONE: very light gray (N8), light brownish gray (5YR 6/1), light gray (N7), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, abundant calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. Fluorescence: NVOS, 10% pin point pale yellow natural fluorescence, slow, weak, faint, even, pale yellowish white cut fluorescence, yellowish white, residual ring under U. V. light, non residual ring at natural light. VPOS. SAND: white (N9), 50% fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite, pyrite.	10
6330 – 6340	30 30 20 20	SANDSTONE: very light gray (N8), light brownish gray (5YR 6/1), light gray (N7), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, abundant calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. No Oil Show. SAND: white (N9), 50% fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium dark gray (N4), medium gray (N5), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous. CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, slightly calcareous in part. Accessories: calcite, pyrite. Note: sample contaminated with 100% chemical mud.	NOS
6340 – 6350	70	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 10 Tr	firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SAND: white (N9), 70% fine to very fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: very light gray (N8), light brownish gray (5YR 6/1), light gray (N7), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, abundant calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. No Oil Show. Accessories: calcite, pyrite. Note: sample contaminated with 100% chemical mud.	NOS
6350 – 6360	70 20 10 Tr	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SAND: white (N9), 70% fine to very fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: very light gray (N8), light brownish gray (5YR 6/1), light gray (N7), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, abundant calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. No Oil Show. Accessories: calcite, pyrite. Note: sample contaminated with 30% chemical mud.	NOS
6360 – 6370	80 20 Tr Tr	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SAND: white (N9), 70% fine to very fine, 30% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: very light gray (N8), light brownish gray (5YR 6/1),	NOS

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		light gray (N7), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, abundant calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. No Oil Show. Accessories: calcite, pyrite. Note: sample contaminated with 10% chemical mud.	
6370 – 6380	70 30 Tr	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: very light gray (N8), light brownish gray (5YR 6/1), light gray (N7), occasionally greenish gray (5G 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, abundant calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. No Oil Show. Accessories: calcite, pyrite. Note: sample contaminated with 10% chemical mud.	NOS
6380 – 6390	40 30 20 10	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 50% fine, 30% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, fair to well sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: light gray (N7), very light gray (N8), occasionally greenish gray (5G 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. No Oil Show. Accessories: calcite, pyrite. Note: sample contaminated with 10% chemical mud.	NOS
6390 – 6400	50	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 50% fine, 30% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, fair to well sorted.	NOS
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SANDSTONE: light gray (N7), very light gray (N8), occasionally greenish gray (5G 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. No Oil Show. Accessories: calcite, pyrite. Note: sample contaminated with 10% chemical mud.	
6400 – 6410	50	SANDSTONE: light gray (N7), very light gray (N8), occasionally greenish gray (5G 6/1), very fine, minor fine to quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, locally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. No Oil Show.	NOS
	20	SAND: white (N9), 50% fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, pyrite. Note: sample contaminated with 40% chemical mud.	
6410 – 6420	50	SANDSTONE: light gray (N7), very light gray (N8), occasionally greenish gray (5G 6/1), very fine, minor fine to quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, locally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. Fluorescence: NVOS, traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, pale yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.	TR
	30	SAND: white (N9), 50% fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, calcareous fragments, pyrite. Note: sample contaminated with 20% chemical mud.	
6420 – 6430	50 30 10 10	SAND: white (N9), 50% medium, 30% fine, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. SANDSTONE: light gray (N7), very light gray (N8), occasionally greenish gray (5G 6/1), very fine, minor fine to quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, locally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, poor visual porosity. Fluorescence: NVOS, 10% pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, calcareous fragments, pyrite, slickenside. Note: sample contaminated with 5% chemical mud.	10
6430 – 6440	50 20 20 10	SAND: white (N9), 50% medium, 40% fine, and 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: light gray (N7), very light gray (N8), occasionally greenish gray (5G 6/1), very fine, minor fine to quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately friable to friable, locally tight, with dark and greenish minerals inclusions, occasionally	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous, poor visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. Accessories: calcite, calcareous fragments, pyrite, slickenside.	
6440 – 6450	70 20 10	SAND: white (N9), 60% medium, 20% fine, 20% coarse quartz grain, hyaline, translucent, subangular to subrounded, fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, calcareous fragments, pyrite.	10
6450 – 6460	90 10 Tr	SAND: white (N9), occasionally light gray (N7), 50% fine, 20% very fine, 30% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair visual porosity. Fluorescence: NVOS, 20% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite.	20
6460 – 6470	90 10	SAND: white (N9), occasionally light gray (N7), 80% fine to very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair visual porosity.	20

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	Fluorescence: NVOS, 20% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite.	
6470 – 6480	90 10 Tr	SAND: white (N9), occasionally light gray (N7), 50% fine to very fine, 40% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair visual porosity. Fluorescence: NVOS, 20% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite.	20
6480 – 6490	90 10 Tr	SAND: white (N9), occasionally light gray (N7), 60% fine to very fine, 30% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair visual porosity. Fluorescence: NVOS, 15% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, slickenside.	15
6490 – 6500	80	SAND: white (N9), occasionally light gray (N7), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 Tr	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair visual porosity. Fluorescence: NVOS, 30% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, slickenside.	30
6500 – 6510	80 20 Tr	SAND: white (N9), occasionally light gray (N7), 60% fine to very fine, 30% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair visual porosity. Fluorescence: NVOS, 20% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray, earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, slickenside.	20
6510 – 6520	80 20 Tr	SAND: white (N9), 50% fine, 30% very fine, 20% medium, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, occasionally microcarbonaceous, fair visual porosity. Fluorescence: NVOS, 20% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part,	20

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, slickenside.	
6520 – 6530	50 40 10	SAND: white (N9), 60% fine to very fine, 30% medium, 10% coarse quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 30% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately Firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, coal, pyrite.	30
6530 – 6540	60 30 10	SAND: white (N9), 60% fine, 20% medium, 20% very fine, traces coarse quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 20% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. Accessories: calcite, coal, pyrite.	20
6540 – 6550	50 30	SAND: white (N9), 60% fine, 20% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellow natural	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 10	fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	10
6550 – 6560	60 30 10 Tr	SAND: white (N9), 70% fine, 20% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	10
6560 – 6570	60 20	SAND: white (N9), 50% fine, 30% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6570 – 6580	70	SAND: white (N9), 50% fine, 30% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable moderately to friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	5
	10	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6580 – 6590	50	SAND: white (N9), 70% fine, 20% medium, 10% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	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, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6590 – 6600	50	SAND: white (N9), 70% fine, 20% medium, 10% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6600 – 6610	50	SAND: white (N9), 60% fine, 20% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, fair sorted.	TR
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6610 – 6620	50 30 20 Tr Tr	SAND: white (N9), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to 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 gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	TR
6620 – 6630	50 30 20 Tr	SAND: white (N9), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
6630 – 6640	40	SAND: white (N9), 50% fine, 30% very fine 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	30	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6640 – 6650	40	SAND: white (N9), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6650 – 6660	40	SAND: white (N9), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	TR
	20	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6660 – 6670	40	SAND: white (N9), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
6670 – 6680	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	TR
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6680 – 6690	50	SAND: white (N9), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	30	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately Firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6690 – 6700	70	SAND: white (N9), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	5
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 Tr	Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6700 – 6710	40 40 20 Tr	SAND: white (N9), 50% fine, 30% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, moderately friable to friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	TR
6710 – 6720	50 40	SAND: white (N9), 50% fine, 30% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 Tr	residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6720 – 6730	40 40 20 Tr	SAND: white (N9), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately Firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	10
6730 – 6740	40 40 20	SAND: white (N9), 50% fine, 30% very fine 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6740 – 6750	40	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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, 20% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6750 – 6760	40	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6760 – 6770	40	SAND: white (N9), 60% fine, 20% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	30	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6770 – 6780	30	SAND: white (N9), 60% fine, 20% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		calcareous in part. Accessories: calcite, coal, pyrite.	
6780 – 6790	30	SAND: white (N9), 50% fine, 30% very fine 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6790 – 6800	40	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SAND: white (N9), 60% fine, 20% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
6800 – 6810	50	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SAND: white (N9), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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, pyrite.	
6810 – 6820	40	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SAND: white (N9), 60% fine, 20% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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, pyrite.	
6820 – 6830	40	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 60% fine, 20% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity.	
	10	Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to 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 gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6830 – 6840	40	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	30	SAND: white (N9), 60% fine, 20% medium, 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	SANDSTONE: very light gray (N8), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity.	
	10	Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to 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 gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6840 – 6850	40	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SAND: white (N9), 60% fine, 20% medium, 20% very fine quartz	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6850 – 6860	50	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SAND: white (N9), 70% fine, 20% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
6860 – 6870	70	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	10	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 10	greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to 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 gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SAND: white (N9), 70% fine, 20% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
6870 – 6880	30 30 10 20	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to 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 gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SAND: white (N9), 70% fine, 20% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	5
6880 – 6890	30 30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 20	fluorescence, slow to 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), 70% fine, 20% medium, 10% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6890 – 6900	30 30 20 20	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medm gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to 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), 60% fine, 20% medium, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	TR
6900 – 6910	30 30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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. (%)
	20	SAND: white (N9), 60% fine, 20% medium, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6910 – 6920	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	30	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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% fine, 30% very fine, 20% medium, , quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6920 – 6930	40	SAND: white (N9), 50% fine, 30% very fine, 20% medium, , quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	30	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6930 – 6940	40	SAND: white (N9), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	30	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, and milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6940 – 6950	40	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		calcareous in part. Accessories: calcite, coal, pyrite.	
6950 – 6960	40	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), 50% fine, 30% very fine, 20% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6960 – 6970	30	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), 50% fine, 30% very fine, 20% medium, , quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
6970 – 6980	30	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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, 20% medium, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6980 – 6990	30	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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, 20% medium, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
6990 – 7000	40	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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, 20% medium, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
7000 – 7010	40	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	30	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), 60% fine, 20% medium, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
7010 – 7020	40	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30 30 Tr	Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately Firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 60% fine, 20% medium, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
7020 – 7030	40 30 30 Tr	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately Firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 70% fine, 20% medium, 10% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	TR
7030 – 7040	40	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately Firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	30	SAND: white (N9), 70% fine, 20% medium, 10% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
7040 – 7050	40	SAND: white (N9), 70% fine, 20% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	30	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
7050 – 7060	40	SAND: white (N9), 70% fine, 20% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	TR
	30	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30 Tr	residual ring at natural light. POS. CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
7060 – 7070	40 30 30 Tr	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to 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), 70% fine, 20% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	TR
7070 – 7080	40 30	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SAND: white (N9), 70% fine, 20% very fine, 10% medium, , quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7080 – 7090	30	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SAND: white (N9), 70% fine, 20% very fine 10% medium, , quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7090 – 7100	40	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	30	SAND: white (N9), 70% fine, 20% very fine, 10% medium, , quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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, pyrite.	
7100 – 7110	50	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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), 70% fine, 20% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7110 – 7120	50	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		sorted. Accessories: calcite, coal, pyrite.	
7120 – 7130	50	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	TR
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SANDSTONE: light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, 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% very fine, 10% medium, , quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7130 – 7140	60	SANDSTONE: light brownish gray 5Y 6/1), light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SAND: white (N9), 60% fine, 30% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7140 – 7150	60	SANDSTONE: light brownish gray 5Y 6/1), light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	10
	20	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SAND: white (N9), 60% fine, 30% very fine, 10% medium, , quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7150 – 7160	60	SANDSTONE: light brownish gray 5Y 6/1), light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	5
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SAND: white (N9), 60% fine, 30% very fine, 10% medium, , quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7160 – 7170	50	SANDSTONE: light brownish gray 5Y 6/1), light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals	10

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30 20	inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately Firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 60% fine, 30% very fine, 10% medium, , quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7170 – 7180	40 40 20	SANDSTONE: light brownish gray 5Y 6/1), light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, 5% pin point pale yellow natural fluorescence, slow to crush, 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), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 60% fine, 30% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	5
7180 – 7186	50 30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light brownish gray 5Y 6/1), light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. Fluorescence: NVOS, Traces pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, yellowish white cut	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 10	fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 60% fine, 30% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
7186 – 7190	50 30 10 10	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, occasionally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: light brownish gray 5Y 6/1, light gray (N7), very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, scarce argillaceous matrix, calcareous cement, friable to moderately friable, locally moderately consolidated, occasionally tight, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, fair visual porosity. No Oil Show. SAND: white (N9), 60% fine, 30% very fine, 10% medium, quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	NOS
7190 – 7200	60 20 20	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, pyrite, coal.	NOS
7200 – 7210	70	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 10	subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray 5Y 6/1, fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. Accessories: calcite, pyrite, coal.	NOS
7210 – 7220	40 30 20 10	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. Accessories: abundant calcite, pyrite, coal.	NOS
7220 – 7230	50 20 20	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part,	NOS

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	micromicaceous, microcarbonaceous, non calcareous. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, pyrite, coal.	
7230 – 7240	40	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS
	20	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, pyrite, coal, slickenside. Note: sample contaminated with 20% chemical mud.	
7240 – 7250	40	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS
	20	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, pyrite, coal, slickenside. Note: sample contaminated with 40% chemical mud.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7250 – 7260	40	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS
	20	SAND: white (N9), 50% fine, 30% medium 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, pyrite, coal, slickenside. Note: sample contaminated with 30% chemical mud.	
7260 – 7270	40	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	20	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SAND: white (N9), 50% fine, 30% medium 20% very fine quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite, slickenside. Note: sample contaminated with 10% chemical mud.	
7270 – 7280	30	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, blocky to subblocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	30	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	
	10	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite, slickenside. Note: sample contaminated with 10% chemical mud.	
7280 – 7290	40	CLAYSTONE: medium dark gray (N4), dark gray (N3), minor olive gray (5Y 4/1), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	NOS
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7290 – 7300	50	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	NOS
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	part, locally micromicaceous, poor visual porosity. No Oil Show. SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7300 – 7310	40	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	NOS
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7310 – 7320	40	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	NOS
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	30	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7320 – 7330	40	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, subblocky to blocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	microcarbonaceous, non calcareous. SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: calcite, coal, pyrite.	
7330 – 7340	40	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, subblocky to blocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	NOS
	30	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidate to moderately friable, occasionally consolidated, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	Tr	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite, coal.	
7340 – 7350	50	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	NOS
	30	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally consolidated, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part. SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite, coal.	
7350 – 7360	60	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	NOS
	30	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally consolidated, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	Tr	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite, coal.	
7360 – 7370	60	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous.	NOS
	30	SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally consolidated, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	Tr	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite, coal.	
7370 – 7380	60	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non calcareous. SANDSTONE: medium gray (N5), light gray (N7), occasionally light brownish gray (5Y 6/1), very fine to fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix, calcareous cement, moderately consolidated to moderately friable, occasionally consolidated, locally tight, dirty in part, with dark and greenish minerals inclusions, with coal veinlets inclusion in part, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	Tr	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite, coal.	
7380 – 7390	40	SANDSTONE: light brownish gray (5Y 6/1), minor medium gray (N5), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous and calcareous matrix, abundant calcareous cement, moderately friable to moderately consolidate, locally tight, dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS
	30	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: abundant calcite, pyrite, coal.	
7390 – 7400	50	SANDSTONE: light brownish gray (5Y 6/1), minor medium gray (N5), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous and calcareous matrix, abundant calcareous cement, moderately friable to moderately consolidated, locally tight, dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS
	20	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 10	microcarbonaceous, non to slightly calcareous in part. SAND: white (N9), 50% fine, 30% medium, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part. Accessories: abundant calcite, pyrite, coal, slickenside.	
7400 – 7410	30 30 20 20	SANDSTONE: light brownish gray (5Y 6/1), minor medium gray (N5), light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous and calcareous matrix, abundant calcareous cement, moderately friable to moderately consolidated, locally tight, dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SAND: white (N9), 50% fine, 30% medium, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part. Accessories: abundant calcite, pyrite, coal, slickenside. Note: sample contaminated with 30% chemical mud.	NOS
7410 – 7420	60 20 10 10	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: very light gray (N8), light gray (N7), minor light brownish gray (5Y 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, abundant calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. SAND: white (N9), 50% fine, 30% medium, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite, coal. Note: sample contaminated with 20% chemical mud.	NOS

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7420 – 7430	30	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	10
	30	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SANDSTONE: very light gray (N8), light gray (N7), minor light brownish gray (5Y 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, occasionally moderately consolidated, locally tight, occasionally dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, fair visual porosity. Fluorescence: NVOS, 10% pin point pale yellow natural fluorescence, slow to crush, weak, faint, even, pale yellowish cut fluorescence, non residual ring under U. V. light, non residual ring at natural light. POS. Accessories: calcite, pyrite, coal.	
7430 – 7440	40	SANDSTONE: very light gray (N8), light brownish gray (5Y 6/1), minor light gray (N7), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, fair visual porosity. Fluorescence: NVOS, 30% pin point gold yellow natural fluorescence, slow to crush, weak, faint, even, pale yellowish cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	30
	40	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part. Accessories: abundant calcite, pyrite, coal.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7440 – 7450	50	SANDSTONE: very light gray (N8), light gray (N7), minor light brownish gray (5Y 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, fair visual porosity. Fluorescence: NVOS, 30% pin point gold yellow natural fluorescence, slow to crush, weak, faint, even, light yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	30
	20	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	20	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part. Accessories: abundant calcite, pyrite, coal.	
7450 – 7460	30	SANDSTONE: very light gray (N8), light gray (N7), minor light brownish gray (5Y 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, fair visual porosity. Fluorescence: NVOS, 20% pin point gold yellow natural fluorescence, slow to crush, weak, faint, even, light yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. POS.	20
	30	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: abundant calcite, pyrite, coal.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7460 – 7470	40	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	5
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SANDSTONE: very light gray (N8), light gray (N7), minor light brownish gray (5Y 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, fair visual porosity.	
	10	Fluorescence: NVOS, 5% pin point gold yellow natural fluorescence, slow to crush, weak, faint, even, light yellowish white cut fluorescence, milky white residual ring under U. V. light, non residual ring at natural light. FOS. SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: abundant calcite, pyrite, coal.	
7470 – 7480	50	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SANDSTONE: very light gray (N8), light gray (N7), minor light brownish gray (5Y 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, fair visual porosity. No Oil Show.	
	10	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: fair calcite, pyrite.	
7480 – 7490	50	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	NOS
	10	SANDSTONE: very light gray (N8), light gray (N7), minor light brownish gray (5Y 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, fair visual porosity. No Oil Show.	
	10	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: fair calcite, pyrite.	
7490 – 7500	40	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	SANDSTONE: very light gray (N8), light gray (N7), minor light brownish gray (5Y 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, fair visual porosity. No Oil Show. Accessories: fair calcite, pyrite.	
7500 – 7510	50	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	30	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	SANDSTONE: very light gray (N8), light gray (N7), minor light	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		brownish gray (5Y 6/1), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, locally tight, occasionally dirty, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, fair visual porosity. No Oil Show. Accessories: fair calcite, pyrite.	
7510 – 7520	50 30 10 10	SANDSTONE: light gray (N7), medium light gray (N6), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part. SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: fair calcite, pyrite. Note: sample contaminated with 10% chemical mud.	NOS
7520 – 7530	30 30 30 10	CLAYSTONE: medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, with coal veinlets inclusion in part, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: light gray (N7), medium light gray (N6), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: fair calcite, pyrite.	NOS

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7530 – 7540	40	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS
	30	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	20	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: fair calcite, pyrite.	
7540 – 7550	40	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	30	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	20	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: fair calcite, pyrite.	
7550 – 7560	50	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	30	SANDSTONE: medium light gray (N6), light gray (N7), minor very	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: fair calcite, pyrite.	
7560 – 7570	40	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	30	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	Tr	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well to fair sorted. Accessories: fair calcite, pyrite.	
7570 – 7580	50	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. SAND: white (N9), 70% fine, 30% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: fair calcite, pyrite.	
7580 – 7590	50	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	30	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), 70% fine, 30% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: fair calcite, pyrite.	
7590 – 7600	50	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	30	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), 70% fine, 30% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: fair calcite, coal.	
7600 – 7610	60	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS
	10	SAND: white (N9), 70% fine, 30% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: fair calcite, coal.	
7610 – 7620	70	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	10	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), 70% fine, 30% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: fair calcite, coal.	
7620 – 7630	60	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. SAND: white (N9), 70% fine, 30% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: fair calcite, coal.	
7630 – 7640	70	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5) (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	10	SAND: white (N9), 70% fine, 30% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: fair calcite, coal.	
7640 – 7650	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 70% fine, 30% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: fair calcite, coal.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7650 – 7660	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: fair calcite, coal.	
7660 – 7670	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: fair calcite, dolomite.	
7670 – 7680	90	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	calcareous in part. SANDSTONE: medium light gray (N6), light gray (N7), minor very light gray (N8), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: fair calcite, dolomite.	
7680 – 7690	80	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: fair calcite, dolomite.	
7690 – 7700	50	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	30	SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	Tr	SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		visual porosity. No Oil Show. Accessories: fair calcite, dolomite, glauconite.	
7700 – 7710	50 40 10 Tr	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. Accessories: fair calcite, dolomite, glauconite.	NOS
7710 – 7720	50 30 10 10	CLAYSTONE: olive gray (5Y 4/1), medium dark gray (N4), olive gray (5Y 4/1), minor dark gray (N3), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. Accessories: fair calcite, dolomite, glauconite.	NOS
7720 – 7730	60 30	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	NOS

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 Tr	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. Accessories: fair calcite, dolomite, glauconite.	
7730 – 7740	50 30 20 Tr	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. Accessories: fair calcite, dolomite, glauconite.	NOS
7740 – 7750	30 30 20 20	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. SAND: white (N9), 80% fine, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	NOS

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: fair calcite, dolomite, glauconite.	
7750 – 7760	40	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SAND: white (N9), 80% fine, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
		Accessories: fair calcite, dolomite, glauconite.	
7760 – 7770	80	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	Tr	SAND: white (N9), 80% fine, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	Tr	SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show.	
		Accessories: fair calcite, dolomite, glauconite.	
7770 – 7780	60	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	30	SAND: white (N9), 80% fine, 20% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	10	SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	Tr	subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor visual porosity. No Oil Show. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: fair calcite, dolomite, glauconite.	
7780 – 7790	40 30 30	SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, fair .visual porosity. Fluorescence: NVOS, 20% pin point yellowish white natural fluorescence, slow, faint, faint, even, light 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% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. Accessories: fair calcite, dolomite, glauconite.	20
7790 – 7800	40 30 30	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, fair visual porosity. Fluorescence: NVOS, 10% pin point yellowish white natural fluorescence, slow, faint, faint, even, light 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% very fine, quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: fair calcite, dolomite, glauconite.	10

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
7800 – 7810	40	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	25
	30	SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	30	SANDSTONE: light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, 25% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. Accessories: fair calcite, dolomite, glauconite.	
7810 – 7820	40	SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	20
	30	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	30	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, 20% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. Accessories: fair calcite, dolomite, glauconite.	
7820 – 7830	40	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix to calcareous in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, 30% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	30

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	30	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. Accessories: fair calcite, glauconite.	
7830 – 7840	50	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidate in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, 25% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	25
	30	SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. Accessories: fair calcite, glauconite.	
7840 – 7850	50	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1) minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, 30% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	30
	30	SAND: white (N9), 80% fine, 20% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. Accessories: fair calcite, glauconite.	
7850 – 7860	50	SANDSTONE: light gray (N7), light brownish gray minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30 20	in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, 20% pin point yellowish white natural fluorescence, slow, faint, faint, even, light 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% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. Accessories: fair calcite, glauconite.	20
7860 – 7870	40 30 30	SAND: white (N9), 70% fine, 30% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1) minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, 20% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. Accessories: calcite, glauconite.	20
7870 – 7880	40 40 20	SAND: white (N9), 60% fine, 40% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, 20% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium	20

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. Accessories: calcite, glauconite.	
7880 – 7890	50 30 20	SAND: white (N9), 60% fine, 40% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1) minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, 15% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. Accessories: calcite, glauconite.	15
7890 – 7900	50 30 10 10	SAND: white (N9), 60% fine, 40% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, 15% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, glauconite.	15
7900 – 7910	50	SAND: white (N9), 60% fine, 40% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, 15% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	15
	10	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, glauconite.	
7910 – 7920	50	SAND: white (N9), 60% fine, 40% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	20
	30	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, 20% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	10	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	10	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, glauconite.	
7920 – 7930	40	SAND: white (N9), 60% fine, 40% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	30	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30 Tr	to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, 20% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, glauconite.	20
7930 – 7940	40 40 10 10	SAND: white (N9), 60% fine, 40% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, 20% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, glauconite.	20
7940 – 7950	40 40	SAND: white (N9), 60% fine, 40% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidate di n part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10 10	part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, 5% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, glauconite.	
7950 – 7960	40 30 30	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, 10% pin point yellowish white natural fluorescence, slow, faint, faint, even, light 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% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. Accessories: calcite, glauconite.	10
7960 – 7970	40 30 30	SAND: white (N9), 70% fine, 30% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, 5% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to	5

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. Accessories: calcite, glauconite.	
7970 – 7980	40 30 30	SAND: white (N9), 70% fine, 30% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, 5% pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. Accessories: calcite, glauconite.	5
7980 – 7990	70 20 10	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, Traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light 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% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, glauconite.	TR
7990 – 8000	60 30	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	10	grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, 10% pin point yellowish white natural fluorescence, slow, faint, faint, even, light 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% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, glauconite.	10
8000 – 8010	50 30 20	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, 5% pin point yellowish white natural fluorescence, slow, faint, faint, even, light 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% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, glauconite.	5
8010 – 8020	50 30 20	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair .visual porosity. Fluorescence: NVOS, Traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light 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% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
		Accessories: calcite.	
8020 – 8030	40 30 30	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidated in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, 5% pin point yellowish white natural fluorescence, slow, faint, faint, even, light 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% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite.	5
8030 – 8040	50 30 20	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SANDSTONE: light gray (N7), light brownish gray (5Y 6/1). minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, moderately consolidate in part, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light 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% very fine, Traces medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite.	TR
8040 – 8050	30	SANDSTONE: light gray (N7), very light gray (N8), minor light brownish gray (5Y 6/1), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally friable, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	30	fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	20	SAND: white (N9), 60% fine, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite.	
8050 – 8060	30	SANDSTONE: light gray (N7), very light gray (N8), minor light brownish gray (5Y 6/1), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally friable, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light 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, 20% very fine, 20% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite.	
8060 – 8070	40	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, subblocky to blocky, subtabular in part, locally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	20	SANDSTONE: light gray (N7), very light gray (N8), minor light brownish gray (5Y 6/1), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, locally	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20 20	tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite.	TR
8070 – 8080	30 30 20 20	SANDSTONE: light gray (N7), very light gray (N8), minor light brownish gray (5Y 6/1), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite.	TR
8080 – 8090	40	SANDSTONE: light brownish gray (5Y 6/1), light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous to argillaceous matrix in part, calcareous cement, friable to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS.	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	40 10 10	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, subblocky to blocky, subtabular in part, locally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: abundant calcite.	
8090 – 8100	30 30 20 20	SANDSTONE: light brownish gray (5Y 6/1), light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous to argillaceous matrix in part, calcareous cement, friable to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: abundant calcite, coal.	TR
8100 – 8110	30 30 20	SANDSTONE: light brownish gray (5Y 6/1), light gray (N7), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous to argillaceous matrix in part, calcareous cement, friable to moderately friable, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. VPOS. SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: abundant calcite, coal.	
8110 – 8120	40 30 20 10	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous to argillaceous matrix in part, calcareous cement, moderately friable to friable, minor moderately consolidated, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, slickenside.	TR
8120 – 8130	40 20 20	SANDSTONE: light gray (N7), very light gray (N8), minor light brownish gray (5Y 6/1), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally friable, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS. SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to	TR

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, slickenside.	
8130 – 8140	40	SANDSTONE: light gray (N7), very light gray (N8), minor light brownish gray (5Y 6/1), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally friable, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	TR
	30	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal, pyrite.	
8140 – 8150	40	SANDSTONE: light gray (N7), very light gray (N8), minor light brownish gray (5Y 6/1), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally friable, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	TR
	20	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted.	
	20	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, blocky to subblocky, subtabular in part, locally amorphous, moderately firm to firm, occasionally moderately soft, silty in part, micromicaceous,	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part. Accessories: calcite, coal, pyrite.	
8150 – 8160	40	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, subblocky to blocky, subtabular in part, locally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	TR
	30	SANDSTONE: light gray (N7), very light gray (N8), minor light brownish gray (5Y 6/1), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, argillaceous to calcareous matrix in part, calcareous cement, moderately friable to moderately consolidated, occasionally friable, locally tight, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	10	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite, coal.	
8160 – 8170	40	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous to argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, tight in part, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	TR
	20	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, subblocky to blocky, subtabular in part, locally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	calcareous in part. SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite, coal.	
8170 – 8180	30	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous to argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, tight in part, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. Fluorescence: NVOS, traces pin point yellowish white natural fluorescence, slow, faint, faint, even, light yellowish white cut fluorescence, milky white, residual ring under U. V. light, non residual ring at natural light. POS.	TR
	30	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, subblocky to blocky, subtabular in part, locally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, pyrite, coal.	
8180 – 8190	50	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, subblocky to blocky, subtabular in part, locally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part.	NOS
	20	SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	
	20	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous to argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidated, tight in part, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. No Oil Show.	
	10	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal, pyrite	
8190 – 8198	70	CLAYSTONE: olive gray (5Y 4/1), dark gray (N3), minor medium dark gray (N4), occasionally medium gray (N5), earthy, subblocky	

INTERVAL (Feet)	%	DESCRIPTION	FLUOR. (%)
	20	to blocky, subtabular in part, locally amorphous, moderately firm to firm, locally moderately soft, silty in part, micromicaceous, microcarbonaceous, non to slightly calcareous in part. SILTSTONE: medium gray (N5), medium dark gray (N4), earthy, subblocky to blocky, amorphous, moderately firm, micromicaceous, microcarbonaceous, grading to very fine sandstone in part, slightly calcareous in part.	NOS
	10	SANDSTONE: light gray (N7), light brownish gray (5Y 6/1), minor very light gray (N8), medium light gray (N6), fine to very fine quartz grain, hyaline, subangular to subrounded, well sorted, calcareous to argillaceous matrix in part, calcareous cement, moderately friable to friable, locally moderately consolidate, tight in part, dirty in part, with dark and greenish minerals inclusions, microcarbonaceous in part, locally micromicaceous, poor to fair visual porosity. No Oil Show.	
	Tr	SAND: white (N9), 60% fine, 30% very fine, 10% medium quartz grain, hyaline, translucent, subangular to subrounded, well sorted. Accessories: calcite, coal, pyrite	
FINAL TOTAL DEPTH 8198.0 ft. MD(RT); 4491.9 ft. TVD(RT)			

WELL: LO6-30D

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
HELICO Mbr.							
460	12	0,0	0	0	0	0	0
461	15	0,0	0	0	0	0	0
462	15	0,0	0	0	0	0	0
463	14	0,0	0	0	0	0	0
464	15	0,0	0	0	0	0	0
465	15	0,0	0	0	0	0	0
466	14	0,0	0	0	0	0	0
467	13	0,0	0	0	0	0	0
468	24	0,0	0	0	0	0	0
469	43	0,0	0	0	0	0	0
470	34	0,0	0	0	0	0	0
471	32	0,2	22	0	0	0	0
472	39	0,3	34	0	0	0	0
473	24	0,2	20	0	0	0	0
474	41	0,3	27	0	0	0	0
475	55	0,2	24	0	0	0	0
476	31	0,2	24	0	0	0	0
477	36	0,3	31	0	0	0	0
478	41	0,4	37	0	0	0	0
479	12	0,2	24	0	0	0	0
480	6	0,2	24	0	0	0	0
481	6	0,2	20	0	0	0	0
482	6	0,3	28	0	0	0	0
483	10	0,2	24	0	0	0	0
484	51	0,2	21	0	0	0	0
485	99	0,2	21	0	0	0	0
486	81	0,2	21	0	0	0	0
487	55	0,4	42	0	0	0	0
488	41	0,7	66	0	0	0	0
489	38	0,7	74	0	0	0	0
490	42	0,8	77	0	0	0	0
491	82	1,2	121	0	0	0	0
492	59	0,7	68	0	0	0	0
493	48	1,2	120	0	0	0	0
494	50	1,0	101	0	0	0	0
495	95	0,8	82	0	0	0	0
496	54	0,7	73	0	0	0	0
497	98	0,5	51	0	0	0	0
498	41	0,5	47	0	0	0	0
499	33	0,5	47	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
500	24	0,5	47	0	0	0	0
501	24	0,7	70	0	0	0	0
502	24	0,7	70	0	0	0	0
503	16	1,6	159	0	0	0	0
504	24	1,7	169	0	0	0	0
505	22	1,7	166	0	0	0	0
506	30	1,5	154	0	0	0	0
507	29	2,2	201	11	0	0	0
508	25	2,2	201	11	0	0	0
509	25	2,2	201	11	0	0	0
510	10	1,9	180	4	0	0	0
511	8	1,6	156	4	0	0	0
512	18	1,5	140	4	0	0	0
513	18	1,5	140	4	0	0	0
514	17	1,1	105	4	0	0	0
515	14	1,1	103	4	0	0	0
516	16	1,1	100	4	0	0	0
517	20	1,7	160	4	0	0	0
518	30	2,2	206	7	0	0	0
519	16	2,2	210	7	0	0	0
520	18	2,0	197	0	0	0	0
521	22	1,8	178	3	0	0	0
522	26	1,6	164	0	0	0	0
523	22	1,2	114	2	0	0	0
524	17	1,2	113	2	0	0	0
525	17	1,1	109	2	0	0	0
526	10	1,0	101	0	0	0	0
527	24	0,8	79	0	0	0	0
528	6	0,4	37	0	0	0	0
529	17	1,0	97	0	0	0	0
530	17	1,5	136	5	0	0	0
531	16	1,2	117	3	0	0	0
532	18	1,0	90	3	0	0	0
533	18	0,8	72	2	0	0	0
534	18	0,8	72	2	0	0	0
535	19	0,8	75	3	0	0	0
536	21	0,7	60	3	0	0	0
537	21	0,7	74	0	0	0	0
538	21	0,8	75	0	0	0	0
539	7	0,8	75	0	0	0	0
540	19	0,5	54	0	0	0	0
541	24	0,6	55	2	0	0	0
542	28	0,5	50	0	0	0	0
543	7	0,7	71	2	0	0	0
544	33	0,7	67	0	0	0	0
545	30	0,9	86	0	0	0	0
546	30	0,9	89	0	0	0	0
547	25	1,1	98	5	0	0	0
548	30	0,9	83	3	0	0	0
549	28	0,9	85	0	0	0	0
550	30	0,9	87	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
551	14	0,9	90	2	0	0	0
552	9	0,7	72	0	0	0	0
553	41	0,7	67	0	0	0	0
554	48	0,6	64	0	0	0	0
555	40	0,6	60	0	0	0	0
556	45	0,5	49	2	0	0	0
557	47	0,5	48	2	0	0	0
558	75	0,8	77	4	0	0	0
559	49	0,4	44	0	0	0	0
560	14	0,2	24	0	0	0	0
561	16	0,3	32	0	0	0	0
562	29	0,5	43	4	0	0	0
563	29	0,4	37	3	0	0	0
564	22	0,3	25	0	0	0	0
565	22	0,4	38	0	0	0	0
566	22	0,6	58	0	0	0	0
567	23	0,6	58	0	0	0	0
568	15	0,6	62	0	0	0	0
569	22	0,7	61	3	0	0	0
570	26	0,7	68	0	0	0	0
571	26	0,6	60	0	0	0	0
572	26	0,6	55	0	0	0	0
573	23	0,7	70	0	0	0	0
574	15	0,8	75	0	0	0	0
575	21	0,8	72	2	0	0	0
576	32	0,7	66	0	0	0	0
577	38	0,6	62	0	0	0	0
578	40	0,5	50	0	0	0	0
579	46	0,5	45	0	0	0	0
580	44	0,5	46	0	0	0	0
581	36	0,5	49	0	0	0	0
582	46	0,5	54	0	0	0	0
583	48	0,7	69	0	0	0	0
584	53	1,2	123	0	0	0	0
585	7	1,5	150	2	0	0	0
586	36	1,8	177	0	0	0	0
587	24	2,3	222	2	0	0	0
588	24	2,3	227	0	0	0	0
589	22	1,9	178	4	0	0	0
590	28	1,6	150	3	0	0	0
591	31	1,5	146	0	0	0	0
592	30	1,6	154	4	0	0	0
593	30	1,6	157	2	0	0	0
594	31	1,5	148	0	0	0	0
595	29	1,5	146	0	0	0	0
596	30	1,7	165	0	0	0	0
597	29	1,8	174	2	0	0	0
598	27	1,8	180	0	0	0	0
599	27	2,9	288	2	0	0	0
600	32	2,4	239	0	0	0	0
601	9	2,0	199	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
602	18	2,0	196	2	0	0	0
603	18	2,2	220	0	0	0	0
604	26	2,5	248	0	0	0	0
605	26	1,9	185	0	0	0	0
606	8	1,9	185	0	0	0	0
607	13	1,7	168	0	0	0	0
608	11	1,6	164	0	0	0	0
609	12	1,2	122	0	0	0	0
610	8	1,1	107	0	0	0	0
611	15	1,9	178	8	0	0	0
612	16	3,8	358	14	0	0	0
613	17	3,6	333	15	0	0	0
614	20	2,3	215	7	0	0	0
615	10	2,2	216	2	0	0	0
616	23	2,2	216	2	0	0	0
617	30	2,1	204	6	0	0	0
618	11	1,9	181	3	0	0	0
619	65	2,2	214	6	0	0	0
620	47	3,0	283	9	0	0	0
621	50	5,0	480	13	0	0	0
622	27	5,0	458	21	0	0	0
623	26	3,0	282	10	0	0	0
624	31	2,3	208	10	0	0	0
625	31	2,1	200	6	0	0	0
626	41	2,5	232	8	0	0	0
627	37	2,9	256	19	0	0	0
628	47	3,2	290	16	0	0	0
629	31	2,8	266	6	0	0	0
630	24	2,9	271	8	0	0	0
631	39	2,5	238	9	0	0	0
632	36	2,4	226	10	0	0	0
633	34	3,0	279	12	0	0	0
634	8	2,9	265	12	0	0	0
635	10	2,4	214	13	0	0	0
636	11	0,8	78	3	0	0	0
637	41	1,0	84	7	0	0	0
638	70	0,8	75	2	0	0	0
639	85	0,8	75	3	0	0	0
640	78	1,1	99	6	0	0	0
641	53	1,0	95	5	0	0	0
642	58	1,3	118	4	0	0	0
643	70	1,3	118	4	0	0	0
644	43	0,9	89	0	0	0	0
645	46	0,8	82	0	0	0	0
646	69	1,1	105	4	0	0	0
647	15	1,4	141	2	0	0	0
648	25	1,3	123	2	0	0	0
649	25	1,1	104	2	0	0	0
650	15	1,1	104	4	0	0	0
651	15	1,2	104	5	1	0	0
652	20	0,7	56	7	2	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
653	21	3,6	314	13	7	0	0
654	9	3,8	355	9	2	0	0
655	7	1,0	85	6	0	0	0
656	6	0,5	37	7	0	0	0
657	22	0,5	40	7	0	0	0
658	22	0,5	36	6	0	0	0
659	27	0,4	34	5	0	0	0
660	20	0,5	41	5	0	0	0
661	17	1,3	115	6	0	0	0
662	18	1,3	118	6	0	0	0
663	15	1,3	112	8	0	0	0
664	8	0,9	83	6	0	0	0
665	6	1,0	91	6	0	0	0
666	23	0,9	73	7	0	0	0
667	40	0,9	68	10	0	0	0
668	40	0,4	22	11	0	0	0
669	16	0,4	34	6	0	0	0
670	23	0,7	59	6	0	0	0
671	31	0,9	77	6	0	0	0
672	29	1,6	151	7	0	0	0
673	48	1,6	151	7	0	0	0
674	72	2,1	197	7	0	0	0
675	35	2,2	204	7	0	0	0
676	18	2,0	182	8	0	0	0
677	10	2,0	182	8	0	0	0
678	10	2,0	182	8	0	0	0
679	38	2,7	244	7	5	0	0
680	29	2,5	235	6	0	0	0
681	39	1,7	156	6	0	0	0
682	16	1,5	145	5	0	0	0
683	16	1,5	145	5	0	0	0
684	36	1,6	141	8	0	0	0
685	42	1,4	126	6	0	0	0
686	33	1,1	100	5	0	0	0
687	28	1,1	98	6	0	0	0
688	26	1,5	139	7	0	0	0
689	46	1,6	144	7	0	0	0
690	40	2,1	204	6	0	0	0
691	43	2,6	246	7	0	0	0
692	35	3,0	279	11	0	0	0
693	32	3,0	279	11	0	0	0
694	41	3,2	269	16	7	0	0
695	19	4,1	362	15	7	0	0
696	28	4,6	420	16	4	0	0
697	16	5,3	485	14	7	0	0
698	7	3,1	272	11	6	0	0
699	5	0,8	63	6	2	0	0
700	5	0,7	63	6	0	0	0
701	6	1,0	90	6	0	0	0
702	12	1,4	126	7	0	0	0
703	20	1,2	111	7	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
704	20	1,2	111	7	0	0	0
705	30	0,9	74	8	0	0	0
706	38	1,4	123	8	0	0	0
707	6	1,9	171	12	0	0	0
708	19	2,3	206	16	0	0	0
709	6	2,8	231	19	5	0	0
710	14	2,0	173	8	4	0	0
711	16	1,1	91	9	0	0	0
712	10	0,8	65	11	0	0	0
713	21	0,9	75	6	0	0	0
714	20	1,4	133	6	0	0	0
715	11	1,5	138	6	0	0	0
716	15	2,2	202	10	0	0	0
717	16	2,2	202	11	0	0	0
718	19	1,8	158	12	0	0	0
719	16	1,7	150	13	0	0	0
720	25	2,2	203	10	0	0	0
721	13	2,1	194	9	0	0	0
722	9	1,5	123	8	4	0	0
723	13	0,8	68	7	0	0	0
724	13	0,4	28	7	0	0	0
725	21	0,4	28	7	0	0	0
726	22	0,5	38	7	0	0	0
727	24	0,5	40	6	0	0	0
728	16	0,5	41	6	0	0	0
729	21	0,6	45	6	0	0	0
730	21	0,7	55	6	0	0	0
731	20	0,5	35	7	0	0	0
732	14	0,5	36	7	0	0	0
733	15	0,5	36	7	0	0	0
734	15	0,5	40	7	0	0	0
735	17	0,7	54	7	0	0	0
736	17	0,7	54	9	0	0	0
737	20	7,8	702	32	6	0	0
738	14	5,9	518	26	8	0	0
739	20	4,0	371	9	6	0	0
740	26	2,6	228	15	0	0	0
741	63	2,6	228	15	0	0	0
742	57	2,0	187	7	0	0	0
743	22	1,6	146	9	0	0	0
744	56	1,5	140	8	0	0	0
745	17	1,4	125	7	0	0	0
746	16	1,3	120	6	0	0	0
747	19	2,3	209	10	0	0	0
748	18	3,1	266	9	9	0	0
749	24	4,5	414	9	8	0	0
750	5	4,7	433	14	6	0	0
751	9	2,8	252	8	4	0	0
752	20	2,0	183	8	0	0	0
753	8	2,2	201	9	0	0	0
754	25	3,5	338	9	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
755	47	4,1	392	10	0	0	0
756	38	4,4	421	10	0	0	0
LOBITOS Mbr.							
757	38	3,2	284	12	6	0	0
758	11	3,2	294	9	4	0	0
759	31	4,0	370	10	5	0	0
760	33	4,5	407	14	6	0	0
761	36	4,8	434	18	4	0	0
762	48	4,8	434	18	4	0	0
763	48	4,8	434	18	4	0	0
764	58	4,6	413	16	5	0	0
765	76	4,7	405	20	9	0	0
766	29	6,1	562	17	5	0	0
767	63	7,4	684	23	5	0	0
768	95	7,4	684	23	5	0	0
769	88	8,6	786	23	11	0	0
770	72	9,5	869	25	12	0	0
771	64	9,5	869	26	13	0	0
772	64	15,5	1441	44	12	0	0
773	50	18,0	1638	57	21	0	0
774	55	16,4	1522	37	18	0	0
775	57	14,1	1303	41	13	0	0
776	41	11,9	1090	36	14	0	0
777	53	9,7	887	26	15	0	0
778	63	8,6	791	28	8	0	0
779	44	7,6	694	22	9	0	0
780	46	7,0	650	20	7	0	0
781	59	7,3	662	27	7	0	0
782	67	7,8	726	19	7	0	0
783	42	10,1	935	23	12	0	0
784	32	10,6	998	30	4	0	0
785	41	11,2	1062	21	7	0	0
786	55	13,2	1270	20	5	0	0
787	44	9,1	854	24	4	0	0
788	28	7,3	652	25	11	0	0
789	68	7,8	730	15	9	0	0
790	68	8,9	779	34	18	0	0
791	49	9,3	823	29	20	0	0
792	32	9,2	820	32	16	0	0
793	53	7,9	720	17	14	0	0
794	31	7,2	658	17	12	0	0
795	112	7,3	658	17	14	0	0
796	74	7,3	660	21	13	0	0
797	90	7,0	636	18	12	0	0
798	93	6,7	612	15	12	0	0
799	89	6,1	568	13	8	0	0
800	79	6,1	568	13	8	0	0
801	88	5,8	538	12	9	0	0
802	100	6,1	580	8	6	0	0
803	97	6,1	580	8	6	0	0
804	86	8,2	792	6	6	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
805	65	10,0	972	7	6	0	0
806	45	10,0	972	8	6	0	0
807	28	11,2	1094	8	6	0	0
808	56	11,2	1094	8	6	0	0
809	75	12,0	1172	9	6	0	0
810	89	11,6	1126	9	6	0	0
811	76	10,9	1058	9	7	0	0
812	93	10,9	1058	10	7	0	0
813	125	9,4	912	8	6	0	0
814	78	8,5	815	8	6	0	0
815	68	8,5	815	8	6	0	0
816	83	8,0	773	9	5	0	0
817	85	6,8	648	8	5	0	0
818	68	7,0	674	8	5	0	0
819	72	7,0	674	8	5	0	0
820	65	7,2	694	6	6	0	0
821	45	10,4	1012	7	4	0	0
822	80	10,4	1012	7	4	0	0
823	85	24,5	2413	12	5	0	0
824	73	25,8	2543	12	6	0	0
825	51	25,8	2539	13	7	0	0
826	52	24,9	2405	25	15	0	0
827	56	24,6	2408	15	8	0	0
828	65	24,6	2408	16	9	0	0
829	64	25,1	2381	50	14	0	0
830	39	27,2	2562	60	18	0	0
831	82	28,1	2641	67	19	0	0
832	91	28,1	2641	67	19	0	0
833	105	2,2	191	9	4	0	0
834	85	2,4	206	9	7	0	0
835	104	2,4	206	8	7	0	0
836	95	2,4	206	8	7	0	0
837	61	1,6	146	9	0	0	0
838	99	1,6	140	9	0	0	0
839	52	1,1	93	9	0	0	0
840	33	1,3	121	7	0	0	0
841	42	1,6	143	7	0	0	0
842	61	5,0	483	7	0	0	0
843	58	4,9	483	6	0	0	0
844	51	5,6	544	8	0	0	0
845	55	5,6	544	8	0	0	0
846	63	5,6	543	7	0	0	0
847	66	5,4	529	7	0	0	0
848	57	5,0	488	8	0	0	0
849	63	5,0	488	9	0	0	0
850	63	4,8	460	9	0	0	0
851	65	4,7	452	8	0	0	0
852	69	5,1	499	8	0	0	0
853	69	5,1	499	8	0	0	0
854	52	4,7	459	8	0	0	0
855	46	5,1	500	6	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
856	80	5,1	500	6	0	0	0
857	82	4,9	482	6	0	0	0
858	85	6,0	588	6	0	0	0
859	68	6,0	588	6	0	0	0
860	84	7,2	713	6	0	0	0
861	78	8,7	847	10	0	0	0
862	94	8,6	847	6	0	0	0
863	120	17,4	1671	37	0	0	0
864	105	17,8	1693	47	0	0	0
865	83	17,8	1693	47	0	0	0
866	104	17,8	1693	47	0	0	0
867	119	17,2	1665	33	0	0	0
868	105	17,3	1672	33	0	0	0
869	92	17,2	1672	27	0	0	0
870	65	14,9	1444	24	0	0	0
871	30	14,9	1444	25	0	0	0
872	45	13,2	1271	26	0	0	0
873	76	12,1	1164	26	0	0	0
874	85	10,4	1004	22	0	0	0
875	50	8,9	867	13	0	0	0
876	34	7,0	690	7	0	0	0
877	60	6,4	632	5	0	0	0
878	60	5,9	573	11	0	0	0
879	60	5,9	573	11	0	0	0
880	97	5,6	544	9	0	0	0
881	56	5,6	547	9	0	0	0
882	38	5,7	550	9	0	0	0
883	45	5,6	550	8	0	0	0
884	75	6,1	582	14	0	0	0
885	56	7,9	768	14	0	0	0
886	47	9,3	916	6	0	0	0
887	58	10,1	1007	0	0	0	0
888	94	10,1	1007	0	0	0	0
889	86	10,0	1002	0	0	0	0
890	81	10,0	997	0	0	0	0
891	68	9,9	991	0	0	0	0
892	70	9,0	898	0	0	0	0
893	80	9,2	915	0	0	0	0
894	85	9,2	915	0	0	0	0
895	77	9,2	919	0	0	0	0
896	111	9,2	919	0	0	0	0
897	88	9,3	925	0	0	0	0
898	67	9,6	955	0	0	0	0
899	83	9,6	963	0	0	0	0
900	83	9,9	988	0	0	0	0
901	74	9,9	988	0	0	0	0
902	100	10,0	1002	0	0	0	0
903	88	10,2	1016	0	0	0	0
904	84	10,2	1016	0	0	0	0
905	95	10,2	1016	0	0	0	0
906	85	10,4	1043	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
907	100	10,7	1070	0	0	0	0
908	65	10,9	1094	0	0	0	0
909	104	11,8	1158	12	0	0	0
910	118	6,3	624	6	0	0	0
911	79	6,3	624	6	0	0	0
912	48	8,2	808	7	0	0	0
913	77	8,7	856	7	0	0	0
914	83	8,7	856	7	0	0	0
915	59	5,5	539	6	0	0	0
916	51	4,8	470	6	0	0	0
917	73	4,3	413	11	0	0	0
918	101	4,3	413	11	0	0	0
919	94	3,9	380	7	0	0	0
920	89	3,4	325	7	0	0	0
921	100	3,1	305	0	0	0	0
922	85	3,1	305	0	0	0	0
923	80	3,1	305	0	0	0	0
924	75	2,4	236	0	0	0	0
925	80	2,0	196	0	0	0	0
926	87	1,9	191	0	0	0	0
927	74	1,9	191	0	0	0	0
928	85	1,5	154	0	0	0	0
929	93	1,7	172	0	0	0	0
930	97	1,7	172	0	0	0	0
931	70	1,7	172	0	0	0	0
932	96	1,9	185	0	0	0	0
933	74	2,1	212	0	0	0	0
934	100	2,7	272	0	0	0	0
935	111	2,7	272	0	0	0	0
936	85	2,7	272	0	0	0	0
937	121	3,5	350	0	0	0	0
938	95	8,8	880	0	0	0	0
939	88	9,3	931	0	0	0	0
940	74	9,6	950	7	0	0	0
941	69	9,6	950	7	0	0	0
942	95	9,7	964	6	0	0	0
943	93	9,9	975	6	0	0	0
944	72	9,8	975	5	0	0	0
945	83	9,9	976	6	0	0	0
946	56	9,6	948	9	0	0	0
947	64	9,3	931	0	0	0	0
948	70	8,8	881	0	0	0	0
949	76	8,8	881	0	0	0	0
950	85	7,9	786	0	0	0	0
951	81	7,1	705	0	0	0	0
952	84	7,1	705	0	0	0	0
953	90	6,0	596	0	0	0	0
954	68	6,9	688	0	0	0	0
955	82	8,2	815	0	0	0	0
956	80	8,2	815	0	0	0	0
957	90	8,8	876	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
958	82	8,8	876	0	0	0	0
959	86	9,4	936	0	0	0	0
960	86	10,3	1028	0	0	0	0
961	80	10,3	1028	0	0	0	0
962	89	10,3	1028	0	0	0	0
963	75	10,8	1076	0	0	0	0
964	82	11,3	1127	0	0	0	0
965	45	11,3	1127	0	0	0	0
966	75	11,3	1127	0	0	0	0
967	65	9,1	913	0	0	0	0
968	65	9,1	913	0	0	0	0
969	45	8,5	846	0	0	0	0
970	60	8,5	846	0	0	0	0
971	85	8,5	846	0	0	0	0
972	60	8,6	855	0	0	0	0
973	75	8,6	864	0	0	0	0
974	60	8,6	864	0	0	0	0
975	45	9,2	921	0	0	0	0
976	50	9,2	921	0	0	0	0
977	45	9,8	983	0	0	0	0
978	80	9,8	983	0	0	0	0
979	54	10,1	1006	0	0	0	0
980	65	10,1	1006	0	0	0	0
981	85	10,6	1059	0	0	0	0
982	53	10,9	1078	7	0	0	0
983	80	10,9	1078	7	0	0	0
984	87	11,6	1146	6	0	0	0
985	100	11,9	1181	6	0	0	0
986	95	11,9	1181	7	0	0	0
987	79	11,9	1174	7	0	0	0
988	85	11,9	1174	7	0	0	0
989	75	11,8	1174	6	0	0	0
990	95	10,8	1071	6	0	0	0
991	109	15,0	1463	13	4	0	0
992	85	16,1	1574	12	4	0	0
993	92	18,2	1782	11	5	0	0
994	90	19,9	1909	33	9	0	0
995	90	19,9	1909	33	9	0	0
996	88	20,1	1918	40	9	0	0
997	140	17,9	1712	35	4	0	0
998	75	15,6	1458	46	6	0	0
999	116	15,6	1458	46	6	0	0
1000	132	14,0	1289	40	13	0	0
1001	102	13,0	1220	32	8	0	0
1002	108	1,8	182	0	0	0	0
1003	88	1,8	177	0	0	0	0
1004	95	1,9	190	0	0	0	0
1005	25	3,0	296	0	0	0	0
1006	35	4,5	450	0	0	0	0
1007	63	5,2	515	0	0	0	0
1008	86	5,2	515	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1009	94	5,3	527	0	0	0	0
1010	95	5,3	527	0	0	0	0
1011	82	5,3	532	0	0	0	0
1012	81	5,3	529	0	0	0	0
1013	82	5,3	529	0	0	0	0
1014	79	4,8	483	0	0	0	0
1015	89	4,4	443	0	0	0	0
1016	94	4,4	443	0	0	0	0
1017	96	4,4	443	0	0	0	0
1018	69	4,3	426	0	0	0	0
1019	90	4,3	426	0	0	0	0
1020	91	7,9	789	0	0	0	0
1021	45	7,9	789	0	0	0	0
1022	110	9,3	925	0	0	0	0
1023	121	9,3	925	0	0	0	0
1024	82	10,6	1064	0	0	0	0
1025	112	10,6	1064	0	0	0	0
1026	94	11,6	1156	0	0	0	0
1027	103	11,6	1156	0	0	0	0
1028	106	12,0	1200	0	0	0	0
1029	96	15,0	1502	0	0	0	0
1030	110	14,7	1466	0	0	0	0
1031	52	14,8	1477	0	0	0	0
1032	75	14,8	1477	0	0	0	0
1033	82	14,5	1451	0	0	0	0
1034	51	13,8	1371	6	0	0	0
1035	80	12,8	1262	8	0	0	0
1036	104	10,8	1070	8	0	0	0
1037	76	10,8	1070	8	0	0	0
1038	119	9,3	914	9	0	0	0
1039	109	7,9	776	9	0	0	0
1040	109	6,6	650	8	0	0	0
1041	61	5,9	574	8	0	0	0
1042	76	5,9	574	8	0	0	0
1043	114	5,9	574	8	0	0	0
1044	125	5,6	547	7	0	0	0
1045	144	5,6	547	7	0	0	0
1046	125	5,6	547	7	0	0	0
1047	115	5,3	511	8	0	0	0
1048	124	4,3	425	0	0	0	0
1049	142	4,3	425	0	0	0	0
1050	67	3,5	349	0	0	0	0
1051	120	3,5	349	0	0	0	0
1052	146	10,5	1051	0	0	0	0
1053	45	11,8	1180	0	0	0	0
1054	168	11,8	1180	0	0	0	0
1055	162	11,8	1180	0	0	0	0
1056	162	13,1	1314	0	0	0	0
1057	167	13,1	1314	0	0	0	0
1058	143	13,1	1314	0	0	0	0
1059	62	20,8	2077	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1060	78	19,6	1962	0	0	0	0
1061	81	19,6	1962	0	0	0	0
1062	90	17,6	1758	0	0	0	0
1063	85	17,6	1758	0	0	0	0
1064	88	15,6	1555	0	0	0	0
1065	90	14,6	1462	0	0	0	0
1066	113	14,1	1411	0	0	0	0
1067	90	14,1	1411	0	0	0	0
1068	90	14,1	1408	0	0	0	0
1069	108	14,1	1408	0	0	0	0
1070	99	14,0	1397	0	0	0	0
1071	110	14,0	1397	0	0	0	0
1072	136	13,2	1324	0	0	0	0
1073	127	13,2	1324	0	0	0	0
1074	114	11,9	1189	0	0	0	0
1075	108	11,1	1106	0	0	0	0
1076	91	11,1	1106	0	0	0	0
1077	89	10,5	1048	0	0	0	0
1078	68	10,3	1029	0	0	0	0
1079	98	10,3	1029	0	0	0	0
1080	116	10,9	1085	0	0	0	0
1081	90	12,0	1199	0	0	0	0
1082	116	12,0	1199	0	0	0	0
1083	107	13,3	1328	0	0	0	0
1084	122	13,3	1328	0	0	0	0
1085	94	17,3	1726	0	0	0	0
1086	109	17,8	1775	0	0	0	0
1087	120	17,8	1775	0	0	0	0
1088	153	17,8	1775	0	0	0	0
1089	135	17,8	1783	0	0	0	0
1090	108	17,8	1783	0	0	0	0
1091	108	1,6	163	0	0	0	0
1092	53	1,7	173	0	0	0	0
1093	82	1,6	159	0	0	0	0
1094	54	1,6	163	0	0	0	0
1095	58	1,6	158	0	0	0	0
1096	58	1,6	158	0	0	0	0
1097	85	1,5	153	0	0	0	0
1098	90	1,5	153	0	0	0	0
1099	94	1,5	153	0	0	0	0
1100	84	1,6	159	0	0	0	0
1101	55	1,4	136	0	0	0	0
1102	78	1,7	173	0	0	0	0
1103	107	1,7	173	0	0	0	0
1104	77	2,1	210	0	0	0	0
1105	65	2,6	263	0	0	0	0
1106	82	3,6	351	7	0	0	0
1107	78	4,7	449	10	0	0	0
1108	63	4,7	449	10	0	0	0
1109	73	5,6	535	12	0	0	0
1110	73	6,9	678	9	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1111	60	6,9	678	9	0	0	0
1112	54	6,9	678	9	0	0	0
1113	54	6,9	678	9	0	0	0
1114	70	9,0	899	0	0	0	0
1115	68	9,0	899	0	0	0	0
1116	68	9,0	899	0	0	0	0
1117	58	9,7	972	0	0	0	0
1118	76	10,2	1024	0	0	0	0
1119	77	10,2	1024	0	0	0	0
1120	92	10,8	1077	0	0	0	0
1121	65	11,1	1108	0	0	0	0
1122	59	11,1	1108	0	0	0	0
1123	51	11,1	1108	0	0	0	0
1124	63	11,4	1121	8	0	0	0
1125	63	11,4	1121	8	0	0	0
1126	63	11,5	1138	7	0	0	0
1127	57	11,5	1138	7	0	0	0
1128	57	11,5	1138	7	0	0	0
1129	62	11,4	1122	8	0	0	0
1130	70	11,4	1122	8	0	0	0
1131	78	11,4	1122	8	0	0	0
1132	76	11,4	1130	7	0	0	0
1133	68	11,0	1085	7	0	0	0
1134	73	10,9	1076	7	0	0	0
1135	79	10,9	1076	7	0	0	0
1136	84	10,9	1076	7	0	0	0
1137	84	10,7	1038	10	4	0	0
1138	68	10,7	1038	10	4	0	0
1139	66	10,5	1052	0	0	0	0
1140	75	10,8	1080	0	0	0	0
1141	75	10,8	1078	0	0	0	0
1142	85	10,8	1081	0	0	0	0
1143	67	10,8	1081	0	0	0	0
1144	61	11,2	1119	0	0	0	0
1145	48	11,2	1124	0	0	0	0
1146	77	11,3	1130	0	0	0	0
1147	68	11,3	1130	0	0	0	0
1148	76	11,0	1096	0	0	0	0
1149	62	11,4	1135	0	0	0	0
1150	60	11,2	1108	7	0	0	0
1151	60	11,2	1108	7	0	0	0
1152	63	11,5	1146	0	0	0	0
1153	56	11,3	1128	0	0	0	0
1154	61	11,1	1109	0	0	0	0
1155	54	10,8	1084	0	0	0	0
1156	68	10,9	1091	0	0	0	0
1157	64	10,6	1057	0	0	0	0
1158	54	10,6	1056	0	0	0	0
1159	71	10,5	1046	0	0	0	0
1160	83	10,7	1071	0	0	0	0
1161	58	10,6	1064	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1162	53	10,6	1064	0	0	0	0
1163	67	10,8	1079	0	0	0	0
1164	99	11,0	1097	0	0	0	0
1165	76	9,9	987	0	0	0	0
1166	40	10,0	999	0	0	0	0
1167	198	10,0	999	0	0	0	0
1168	195	10,0	999	0	0	0	0
1169	199	10,6	1056	0	0	0	0
1170	210	10,6	1056	0	0	0	0
1171	192	10,6	1056	0	0	0	0
1172	164	11,2	1124	0	0	0	0
1173	176	11,2	1124	0	0	0	0
1174	170	11,2	1124	0	0	0	0
1175	172	11,2	1119	0	0	0	0
1176	155	11,2	1119	0	0	0	0
1177	158	11,3	1128	0	0	0	0
1178	176	11,3	1128	0	0	0	0
1179	124	11,3	1128	0	0	0	0
1180	151	10,8	1076	0	0	0	0
1181	126	9,9	989	0	0	0	0
1182	148	9,9	989	0	0	0	0
1183	132	9,9	989	0	0	0	0
1184	145	9,0	887	7	0	0	0
1185	109	9,0	887	7	0	0	0
1186	175	8,2	808	6	0	0	0
1187	171	8,2	808	6	0	0	0
1188	145	8,2	808	6	0	0	0
1189	158	7,6	754	6	0	0	0
1190	106	4,9	487	0	0	0	0
1191	65	1,6	159	0	0	0	0
1192	120	1,6	159	0	0	0	0
1193	147	1,7	174	0	0	0	0
1194	129	1,7	174	0	0	0	0
1195	129	1,7	174	0	0	0	0
1196	129	1,7	174	0	0	0	0
1197	75	1,7	174	0	0	0	0
1198	137	1,6	161	0	0	0	0
1199	147	1,6	161	0	0	0	0
1200	172	1,7	166	0	0	0	0
1201	152	1,7	166	0	0	0	0
1202	133	1,9	187	0	0	0	0
1203	135	1,9	188	0	0	0	0
1204	89	1,9	189	0	0	0	0
1205	140	1,9	189	0	0	0	0
1206	148	1,8	183	0	0	0	0
1207	145	1,8	183	0	0	0	0
1208	160	3,5	346	0	0	0	0
1209	126	5,0	495	0	0	0	0
1210	63	5,0	495	0	0	0	0
1211	52	6,5	650	0	0	0	0
1212	65	8,1	814	0	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1213	72	9,3	933	0	0	0	0
1214	67	9,9	990	0	0	0	0
1215	87	9,9	990	0	0	0	0
1216	78	9,6	963	0	0	0	0
1217	92	9,6	964	0	0	0	0
1218	74	9,6	964	0	0	0	0
1219	81	8,8	879	0	0	0	0
1220	83	8,3	827	0	0	0	0
1221	81	8,3	827	0	0	0	0
1222	122	7,8	778	0	0	0	0
1223	101	7,3	729	0	0	0	0
1224	82	6,7	672	0	0	0	0
1225	109	6,6	659	0	0	0	0
1226	124	6,6	659	0	0	0	0
1227	160	6,9	688	0	0	0	0
1228	90	6,9	688	0	0	0	0
1229	139	7,3	726	0	0	0	0
1230	143	7,3	726	0	0	0	0
1231	103	7,6	757	0	0	0	0
1232	79	8,1	812	0	0	0	0
1233	63	8,3	831	0	0	0	0
1234	68	8,8	879	0	0	0	0
1235	88	8,8	879	0	0	0	0
1236	81	8,8	881	0	0	0	0
1237	111	8,8	882	0	0	0	0
1238	91	9,1	910	0	0	0	0
1239	49	9,1	910	0	0	0	0
1240	68	9,1	908	0	0	0	0
1241	54	9,1	908	0	0	0	0
1242	50	9,4	940	0	0	0	0
1243	82	9,7	968	0	0	0	0
1244	77	10,1	1014	0	0	0	0
1245	66	11,0	1103	0	0	0	0
1246	58	11,8	1183	0	0	0	0
1247	66	11,8	1183	0	0	0	0
1248	76	12,3	1233	0	0	0	0
1249	84	12,3	1233	0	0	0	0
1250	84	12,3	1233	0	0	0	0
1251	84	12,3	1233	0	0	0	0
1252	84	12,3	1233	0	0	0	0
1253	76	12,3	1229	0	0	0	0
1254	93	12,3	1225	4	0	0	0
1255	90	12,3	1221	4	0	0	0
1256	86	12,3	1217	7	0	0	0
1257	78	12,3	1217	7	0	0	0
1258	99	12,1	1200	8	0	0	0
1259	116	12,1	1200	8	0	0	0
1260	111	12,0	1182	8	0	0	0
1261	94	11,8	1163	9	0	0	0
1262	92	10,9	1072	9	0	0	0
1263	73	10,6	1039	9	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1264	55	9,5	939	8	0	0	0
1265	152	9,5	939	8	0	0	0
1266	137	9,1	895	8	0	0	0
1267	177	9,1	895	8	0	0	0
1268	195	9,1	897	7	0	0	0
1269	154	9,1	897	7	0	0	0
1270	164	8,9	872	8	0	0	0
1271	151	8,9	872	8	0	0	0
1272	181	8,9	872	8	0	0	0
1273	182	9,2	867	20	6	0	0
1274	193	9,2	867	20	6	0	0
1275	196	9,2	867	20	6	0	0
1276	236	9,7	909	16	11	0	0
1277	240	9,7	909	16	11	0	0
1278	203	9,7	909	16	11	0	0
1279	115	9,7	907	26	5	0	0
1280	150	9,7	907	26	5	0	0
1281	145	9,8	945	13	6	0	0
1282	120	10,2	983	12	7	0	0
1283	118	10,3	983	13	7	0	0
1284	125	9,4	868	21	12	0	0
1285	118	10,1	911	31	16	0	0
1286	118	3,3	291	15	5	0	0
1287	85	3,5	311	14	5	0	0
1288	146	3,4	299	14	6	0	0
1289	139	3,3	288	14	5	0	0
1290	85	3,1	262	19	5	0	0
1291	164	3,1	262	19	5	0	0
1292	164	2,8	239	14	7	0	0
1293	197	2,8	239	14	7	0	0
1294	166	2,8	239	14	7	0	0
1295	155	2,6	226	9	8	0	0
1296	153	2,6	226	9	8	0	0
1297	149	2,6	226	9	8	0	0
1298	146	2,4	208	8	6	0	0
1299	125	2,4	208	8	6	0	0
1300	136	2,3	206	7	5	0	0
1301	132	2,3	206	7	5	0	0
1302	111	2,2	192	9	6	0	0
1303	129	2,2	192	9	6	0	0
1304	132	2,2	192	10	5	0	0
1305	111	2,2	192	10	5	0	0
1306	136	2,0	176	6	4	0	0
1307	133	2,0	176	6	4	0	0
1308	114	1,9	176	6	3	0	0
1309	103	2,1	191	7	3	0	0
1310	111	2,1	195	3	2	0	0
1311	112	2,2	199	5	4	0	0
1312	112	2,3	203	8	6	0	0
1313	86	9,1	791	42	15	0	0
1314	86	9,1	791	42	15	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1315	86	9,1	791	42	15	0	0
1316	79	9,0	786	43	14	0	0
1317	70	8,9	764	46	16	0	0
1318	68	8,9	764	46	16	0	0
1319	65	8,9	764	46	16	0	0
1320	82	8,5	735	42	14	0	0
1321	73	8,1	685	48	14	0	0
1322	84	7,1	628	37	6	0	0
1323	79	7,1	628	37	6	0	0
1324	82	6,6	564	33	14	0	0
1325	77	5,8	511	26	10	0	0
1326	76	5,8	511	26	10	0	0
1327	73	5,3	462	22	10	0	0
1328	90	4,5	398	22	5	0	0
1329	64	4,3	374	23	6	0	0
1330	71	4,1	354	21	5	0	0
1331	69	4,4	385	24	5	0	0
1332	55	4,3	369	23	9	0	0
1333	59	4,5	375	26	9	0	0
1334	65	4,5	388	27	6	0	0
1335	49	4,5	388	27	6	0	0
1336	72	4,9	422	23	9	0	0
1337	65	5,1	455	24	6	0	0
1338	54	5,6	483	29	10	0	0
1339	51	5,9	518	30	8	0	0
1340	60	6,3	547	32	11	0	0
1341	85	6,6	559	39	12	0	0
1342	89	6,5	560	35	10	0	0
1343	91	6,5	560	35	10	0	0
1344	101	6,6	578	36	8	0	0
1345	97	6,6	578	36	8	0	0
1346	88	6,6	578	36	8	0	0
1347	130	6,6	563	37	10	0	0
1348	115	6,4	548	37	11	0	0
1349	115	6,4	533	38	13	0	0
1350	87	6,4	533	38	13	0	0
1351	83	5,7	490	31	10	0	0
1352	83	5,7	490	31	10	0	0
1353	101	5,3	478	23	5	0	0
1354	94	5,4	478	26	5	0	0
1355	91	5,4	478	26	5	0	0
1356	72	5,5	478	28	9	0	0
1357	67	5,6	485	29	8	0	0
1358	84	5,3	466	32	4	0	0
1359	70	5,3	466	32	4	0	0
1360	120	4,9	434	24	6	0	0
1361	153	4,9	434	24	6	0	0
1362	110	4,9	426	24	7	0	0
1363	125	4,9	426	24	7	0	0
1364	109	4,9	434	23	7	0	0
1365	56	6,1	536	30	9	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1366	115	6,1	536	30	9	0	0
1367	151	6,5	548	40	11	0	0
1368	172	6,5	548	40	11	0	0
1369	218	6,5	548	40	11	0	0
1370	228	6,5	548	40	11	0	0
1371	180	6,3	552	40	4	0	0
1372	183	6,3	552	40	4	0	0
1373	178	6,3	552	40	4	0	0
1374	166	6,3	546	38	5	0	0
1375	200	6,2	540	37	6	0	0
1376	219	6,0	525	35	6	0	0
1377	245	5,9	511	33	6	0	0
1378	212	5,9	511	33	6	0	0
1379	137	5,9	511	33	6	0	0
1380	185	4,9	412	30	10	0	0
1381	125	1,9	162	10	4	0	0
1382	195	1,9	162	10	4	0	0
1383	144	1,9	162	10	4	0	0
1384	184	1,9	162	10	4	0	0
1385	190	1,7	139	10	3	0	0
1386	205	1,7	139	10	3	0	0
1387	165	1,4	124	6	3	0	0
1388	159	1,4	124	6	3	0	0
1389	189	1,3	110	6	3	0	0
1390	145	1,3	110	6	3	0	0
1391	133	1,2	101	7	2	0	0
1392	122	1,2	101	7	2	0	0
1393	158	1,2	101	7	3	0	0
1394	137	1,1	89	6	3	0	0
1395	149	1,1	89	5	3	0	0
1396	134	1,1	89	5	3	0	0
1397	123	1,1	93	6	3	0	0
1398	174	2,1	180	11	3	0	0
1399	51	2,5	213	14	4	0	0
1400	68	3,0	252	20	6	0	0
1401	88	3,0	252	20	6	0	0
1402	88	3,0	252	20	6	0	0
1403	65	3,2	277	16	5	0	0
1404	90	3,2	283	17	4	0	0
1405	81	3,3	265	22	10	0	0
1406	69	3,3	265	22	10	0	0
1407	88	3,1	262	18	5	0	0
1408	112	3,1	262	20	5	0	0
1409	112	3,2	261	22	6	0	0
1410	112	3,2	260	24	6	0	0
1411	106	3,2	260	24	6	0	0
1412	108	2,7	229	15	5	0	0
1413	109	2,7	229	15	5	0	0
1414	109	2,7	229	15	5	0	0
1415	110	2,7	229	15	4	0	0
1416	106	2,6	213	16	6	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1417	80	2,6	213	16	6	0	0
1418	77	2,7	229	15	4	0	0
1419	85	2,9	235	22	6	0	0
1420	69	2,7	230	13	5	0	0
1421	49	2,8	236	14	6	0	0
1422	33	3,0	254	16	8	0	0
1423	67	3,0	254	16	8	0	0
1424	88	3,6	286	23	11	0	0
1425	90	3,8	316	21	8	0	0
1426	81	4,1	348	29	5	0	0
1427	73	4,1	348	29	5	0	0
1428	92	4,8	393	31	10	0	0
1429	87	4,7	401	21	11	0	0
1430	81	4,9	426	21	11	0	0
1431	94	4,8	426	19	6	0	0
1432	80	5,1	436	29	9	0	0
1433	84	5,1	436	29	9	0	0
1434	94	5,0	436	18	11	0	0
1435	70	4,9	434	21	8	0	0
1436	62	5,2	436	30	12	0	0
1437	87	5,2	436	30	12	0	0
1438	88	4,7	420	20	6	0	0
1439	104	4,7	420	20	6	0	0
1440	86	4,6	404	21	8	0	0
1441	88	4,8	409	24	11	0	0
1442	91	4,7	408	23	6	0	0
1443	98	4,9	416	25	11	0	0
1444	35	4,9	416	25	11	0	0
1445	77	4,9	420	25	11	0	0
1446	74	4,9	414	24	11	0	0
1447	75	4,7	418	23	5	0	0
1448	100	4,7	418	23	5	0	0
1449	89	4,0	357	17	4	0	0
1450	57	3,8	345	16	4	0	0
1451	163	3,4	287	24	5	0	0
1452	177	3,4	287	24	5	0	0
1453	196	3,4	287	24	5	0	0
1454	172	3,1	273	13	6	0	0
1455	142	3,1	273	13	6	0	0
1456	176	3,1	273	13	6	0	0
1457	150	3,2	277	17	6	0	0
1458	137	3,2	277	17	6	0	0
1459	147	3,2	277	17	6	0	0
1460	161	3,1	266	18	5	0	0
1461	145	3,1	266	18	5	0	0
1462	202	3,1	266	18	5	0	0
1463	217	3,0	265	15	4	0	0
1464	190	3,0	265	15	4	0	0
1465	171	2,9	255	13	4	0	0
1466	151	2,9	255	13	4	0	0
1467	220	2,9	255	13	4	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1468	218	2,9	245	17	4	0	0
1469	180	3,0	235	21	9	0	0
1470	220	3,0	235	21	9	0	0
1471	150	3,0	235	21	9	0	0
1472	182	2,7	226	16	6	0	0
1473	124	2,4	189	15	8	0	0
1474	95	2,4	189	15	8	0	0
1475	85	0,4	22	6	3	0	0
1476	85	0,5	30	6	3	0	0
1477	139	0,5	30	6	3	0	0
1478	159	0,5	30	6	3	0	0
1479	176	0,6	39	5	3	0	0
1480	174	0,6	39	5	3	0	0
1481	173	0,6	39	5	3	0	0
1482	184	0,6	39	5	3	0	0
1483	200	0,5	32	5	2	0	0
1484	181	0,4	32	4	2	0	0
1485	186	0,5	41	4	2	0	0
1486	194	0,4	25	4	2	0	0
1487	139	0,5	38	4	2	0	0
1488	154	0,5	37	5	2	0	0
1489	144	0,5	34	5	3	0	0
1490	142	0,5	34	5	3	0	0
1491	127	0,6	38	5	3	0	0
1492	126	0,6	38	6	3	0	0
1493	143	0,6	38	6	3	0	0
1494	123	1,3	102	8	5	0	0
1495	141	1,3	102	8	5	0	0
1496	55	1,4	105	12	6	0	0
1497	45	1,5	110	11	6	0	0
1498	106	1,6	120	11	6	0	0
1499	96	1,6	125	11	6	0	0
1500	101	1,7	135	12	6	0	0
1501	101	1,9	155	13	6	0	0
1502	55	1,9	145	13	7	0	0
1503	104	1,9	145	13	7	0	0
1504	104	2,0	156	13	7	0	0
1505	95	2,0	160	13	7	0	0
1506	121	2,1	167	14	7	0	0
1507	121	2,2	170	14	8	0	0
1508	96	2,2	175	15	8	0	0
1509	96	2,3	185	14	8	0	0
1510	96	16,5	1408	106	19	0	0
1511	45	16,5	1408	106	19	0	0
1512	83	17,0	1443	113	19	0	0
1513	83	17,4	1478	119	19	0	0
1514	84	17,6	1502	119	19	0	0
1515	83	17,6	1502	114	19	0	0
1516	78	17,6	1494	118	19	0	0
1517	88	18,3	1540	129	21	0	0
1518	83	18,3	1540	129	21	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1519	89	18,8	1592	129	23	0	0
1520	85	19,5	1652	131	23	0	0
1521	82	19,5	1652	131	23	0	0
1522	80	19,5	1659	131	23	0	0
1523	77	19,5	1677	130	23	0	0
1524	71	20,2	1731	130	22	0	0
1525	71	20,2	1731	130	22	0	0
1526	70	21,1	1798	140	22	0	0
1527	79	22,2	1892	150	22	0	0
1528	89	22,5	1948	150	22	0	0
1529	85	22,5	1948	138	19	0	0
1530	83	22,7	1948	151	21	0	0
1531	84	22,7	1943	151	21	0	0
1532	103	22,7	1943	151	21	0	0
1533	107	22,2	1909	140	21	0	0
1534	131	22,2	1909	140	21	0	0
1535	87	22,1	1908	138	19	0	0
1536	112	22,1	1908	138	19	0	0
1537	118	21,6	1864	138	19	0	0
1538	93	21,5	1860	137	18	0	0
1539	88	21,4	1856	135	16	0	0
1540	95	21,2	1836	134	17	0	0
1541	90	21,5	1862	134	19	0	0
1542	106	21,5	1862	134	19	0	0
1543	76	21,5	1862	134	19	0	0
1544	81	21,7	1904	134	18	0	0
1545	92	21,7	1904	129	14	0	0
1546	90	22,6	1971	134	17	0	0
1547	92	23,6	2053	148	17	0	0
1548	103	23,6	2053	148	16	0	0
1549	88	24,9	2180	150	16	0	0
1550	84	30,3	2627	189	21	0	0
1551	90	30,6	2662	192	21	0	0
1552	100	31,0	2696	195	21	0	0
1553	120	31,0	2696	195	21	0	0
1554	138	31,4	2735	195	22	0	0
1555	110	31,5	2739	200	22	0	0
1556	98	31,6	2743	205	22	0	0
1557	78	31,8	2743	207	22	0	0
1558	95	31,8	2743	207	22	0	0
1559	120	31,8	2742	207	22	0	0
1560	140	31,8	2742	207	22	0	0
1561	125	30,8	2681	195	19	0	0
1562	110	30,8	2681	202	22	0	0
1563	100	25,1	2159	170	16	0	0
1564	120	24,6	2119	165	16	0	0
1565	150	24,1	2079	160	15	0	0
1566	170	24,1	2079	160	15	0	0
1567	155	24,1	2079	160	15	0	0
1568	125	25,8	2247	167	15	0	0
1569	85	25,8	2247	167	13	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1570	100	25,8	2247	167	13	0	0
1571	112	30,2	2612	205	21	0	0
1572	115	12,1	1023	88	10	0	0
1573	120	12,1	1023	88	10	0	0
1574	98	11,4	967	83	9	0	0
1575	110	11,4	967	83	9	0	0
1576	95	11,4	967	83	9	0	0
1577	80	11,4	967	83	9	0	0
1578	100	10,5	887	80	9	0	0
1579	120	10,4	875	80	8	0	0
1580	135	10,2	864	79	7	0	0
1581	150	10,2	864	79	7	0	0
1582	120	10,2	864	79	7	0	0
1583	150	10,2	864	79	9	0	0
1584	130	10,1	851	76	9	0	0
1585	121	9,9	838	73	9	0	0
1586	95	10,9	915	78	12	0	0
1587	100	10,9	915	78	12	0	0
1588	85	10,9	915	78	12	0	0
1589	165	11,5	971	80	12	0	0
1590	120	12,1	1027	83	13	0	0
1591	85	12,1	1027	83	13	0	0
1592	95	13,0	1108	90	12	0	0
1593	100	14,0	1190	96	12	0	0
1594	120	20,4	1764	130	18	0	0
1595	85	27,1	2340	168	26	0	0
1596	60	33,8	2916	206	34	0	0
1597	75	28,6	2440	182	33	0	0
1598	93	27,3	2343	177	27	0	0
1599	85	27,3	2343	177	30	0	0
1600	77	26,3	2234	175	30	0	0
1601	72	24,6	2112	159	26	0	0
1602	64	23,9	2029	159	26	0	0
1603	72	23,9	2029	159	28	0	0
1604	90	23,7	2017	151	28	0	0
1605	100	23,7	2017	151	28	0	0
1606	92	23,5	2013	145	27	0	0
1607	100	23,8	2016	158	30	0	0
1608	95	24,2	2044	162	30	0	0
1609	96	24,2	2044	162	30	0	0
1610	112	24,4	2083	162	30	0	0
1611	85	24,5	2122	162	30	0	0
1612	77	24,5	2122	149	24	0	0
1613	88	25,6	2222	150	25	0	0
1614	93	27,1	2358	157	25	0	0
1615	95	27,1	2358	157	25	0	0
1616	91	28,6	2471	176	27	0	0
1617	110	28,6	2471	176	27	0	0
1618	101	28,6	2471	176	27	0	0
1619	89	29,9	2614	175	23	0	0
1620	106	31,7	2736	194	30	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1621	103	31,7	2736	194	30	0	0
1622	103	32,4	2817	194	30	0	0
1623	100	32,4	2817	193	27	0	0
1624	100	33,6	2902	206	33	0	0
1625	112	33,6	2902	206	33	0	0
1626	92	33,1	2878	197	30	0	0
1627	93	33,2	2894	197	30	0	0
1628	50	33,3	2909	197	30	0	0
1629	115	34,1	2966	212	28	0	0
1630	89	34,1	2966	212	25	0	0
1631	99	36,0	3127	219	30	0	0
1632	102	37,6	3265	227	34	0	0
1633	107	37,6	3265	227	34	0	0
1634	92	38,4	3331	241	34	0	0
1635	82	38,4	3331	241	29	0	0
1636	81	39,5	3456	235	25	0	0
1637	90	40,7	3554	242	29	0	0
1638	86	41,9	3619	272	30	0	0
1639	97	41,9	3619	272	30	0	0
1640	87	44,4	3840	285	32	0	0
1641	105	46,9	4062	298	34	0	0
1642	96	46,7	4062	294	31	0	0
1643	110	46,8	4062	294	34	0	0
1644	134	46,0	3974	294	34	0	0
1645	139	46,0	3974	294	37	0	0
1646	116	44,1	3790	288	36	0	0
1647	108	43,1	3697	288	35	0	0
1648	129	43,1	3697	288	35	0	0
1649	126	41,2	3559	266	30	0	0
1650	123	40,2	3465	262	32	0	0
1651	114	39,3	3372	258	34	0	0
1652	84	39,3	3372	258	34	0	0
1653	98	37,0	3170	242	34	0	0
1654	129	36,0	3078	237	34	0	0
1655	114	27,9	2384	180	32	0	0
1656	124	29,3	2484	190	37	0	0
1657	109	29,3	2484	190	37	0	0
1658	111	31,5	2659	209	41	0	0
1659	89	31,5	2659	209	41	0	0
1660	103	32,6	2748	221	44	0	0
1661	50	7,7	640	56	12	0	0
1662	68	7,7	640	56	12	0	0
1663	83	8,3	671	59	18	0	0
1664	102	8,3	671	59	18	0	0
1665	94	8,3	681	60	14	0	0
1666	89	7,8	639	57	15	0	0
1667	114	7,8	639	57	15	0	0
1668	77	7,5	619	55	13	0	0
1669	59	7,3	590	53	15	0	0
1670	74	6,8	550	47	16	0	0
1671	65	6,8	550	47	16	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1672	90	6,8	550	47	16	0	0
1673	105	7,3	619	45	12	0	0
1674	78	9,0	751	55	17	0	0
1675	83	10,5	892	60	18	0	0
1676	67	10,5	892	60	18	0	0
1677	67	11,9	1004	71	22	0	0
1678	62	11,9	1004	71	22	0	0
1679	69	12,0	1004	69	25	0	0
1680	78	7,9	675	41	15	0	0
1681	78	7,9	675	41	15	0	0
1682	75	6,9	575	38	16	0	0
1683	81	5,8	486	38	11	0	0
1684	84	5,8	486	38	11	0	0
1685	85	5,1	428	30	9	0	0
1686	86	4,7	390	31	10	0	0
1687	79	4,7	390	31	10	0	0
1688	88	4,9	400	32	11	0	0
1689	78	4,9	411	36	4	0	0
1690	87	4,9	411	36	4	0	0
1691	86	5,4	432	38	14	0	0
1692	68	5,2	440	33	8	0	0
1693	95	5,2	440	33	8	0	0
1694	130	5,2	435	34	10	0	0
1695	81	5,2	435	34	10	0	0
1696	75	5,2	435	34	10	0	0
1697	101	5,3	440	36	10	0	0
1698	93	5,3	440	36	10	0	0
1699	99	5,4	433	42	12	0	0
1700	103	5,4	442	39	11	0	0
1701	94	5,5	463	39	7	0	0
1702	103	5,5	463	39	7	0	0
1703	100	5,7	478	36	9	0	0
1704	78	5,7	478	36	9	0	0
1705	55	25,3	2118	168	42	0	0
1706	78	23,1	1950	149	34	0	0
1707	75	21,3	1766	150	36	0	0
1708	49	21,3	1766	150	36	0	0
1709	77	19,5	1618	134	32	0	0
1710	67	19,5	1618	134	32	0	0
1711	35	17,6	1452	124	30	0	0
1712	87	16,0	1325	111	29	0	0
1713	97	16,0	1325	111	29	0	0
1714	81	15,0	1251	103	25	0	0
1715	85	14,2	1187	93	25	0	0
1716	79	14,2	1187	93	25	0	0
1717	63	13,6	1129	89	25	0	0
1718	38	13,6	1135	90	23	0	0
1719	68	14,3	1187	92	27	0	0
1720	53	15,6	1290	110	28	0	0
1721	54	16,6	1386	106	32	0	0
1722	33	17,7	1485	111	30	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1723	73	18,6	1561	118	31	0	0
1724	53	22,0	1850	142	36	0	0
1725	78	22,4	1876	141	42	0	0
1726	81	22,0	1837	146	38	0	0
1727	85	22,0	1837	146	38	0	0
1728	84	21,0	1766	134	34	0	0
1729	81	20,5	1716	129	38	0	0
1730	84	20,5	1716	129	38	0	0
1731	90	19,8	1653	128	37	0	0
1732	59	19,8	1653	128	37	0	0
1733	80	18,6	1573	110	32	0	0
1734	89	17,6	1481	107	32	0	0
1735	93	17,6	1481	107	32	0	0
1736	84	16,5	1390	102	29	0	0
1737	58	16,4	1383	99	30	0	0
1738	86	16,2	1368	94	30	0	0
1739	116	15,3	1291	90	28	0	0
1740	80	15,3	1291	90	28	0	0
1741	90	16,0	1351	95	29	0	0
1742	60	17,5	1493	101	27	0	0
1743	93	19,0	1626	105	33	0	0
1744	93	19,0	1626	105	33	0	0
1745	95	19,6	1672	109	34	0	0
1746	99	20,6	1789	102	34	0	0
1747	51	20,6	1789	102	34	0	0
1748	43	20,6	1789	102	34	0	0
1749	85	23,9	2048	126	41	0	0
1750	86	27,9	2423	139	42	0	0
1751	90	28,8	2513	139	44	0	0
1752	50	29,7	2604	138	45	0	0
1753	84	26,6	2326	123	42	0	0
1754	92	26,6	2326	123	42	0	0
1755	87	22,1	1945	104	30	0	0
1756	119	21,4	1876	99	32	0	0
1757	99	21,4	1876	99	32	0	0
1758	117	21,4	1876	99	32	0	0
1759	60	7,4	622	40	18	0	0
1760	80	7,4	631	40	15	0	0
1761	80	7,4	631	40	15	0	0
1762	66	8,4	687	48	23	0	0
1763	66	8,6	718	51	18	0	0
1764	72	8,6	718	51	18	0	0
1765	74	8,8	748	49	17	0	0
1766	73	9,4	795	52	18	0	0
1767	70	10,1	858	55	20	0	0
1768	75	11,4	953	63	26	0	0
1769	82	11,4	953	63	26	0	0
1770	86	12,9	1086	69	28	0	0
1771	77	14,1	1222	68	26	0	0
1772	90	14,1	1222	68	26	0	0
1773	74	15,5	1347	72	27	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1774	90	16,7	1437	82	31	0	0
1775	78	16,7	1437	82	31	0	0
1776	79	17,5	1521	80	30	0	0
1777	79	18,1	1588	84	27	0	0
1778	78	19,2	1677	92	29	0	0
1779	79	19,2	1677	92	29	0	0
1780	80	19,9	1732	96	33	0	0
1781	76	20,5	1782	104	31	0	0
1782	84	21,2	1835	107	34	0	0
1783	79	21,2	1835	107	34	0	0
1784	94	21,4	1843	108	37	0	0
1785	82	21,6	1852	112	39	0	0
1786	74	21,6	1852	112	39	0	0
1787	73	22,0	1886	115	38	0	0
1788	81	22,6	1933	114	46	0	0
1789	60	19,0	1603	103	40	0	0
1790	74	19,0	1603	103	40	0	0
1791	72	16,8	1430	91	31	0	0
1792	47	13,7	1158	79	26	0	0
1793	51	12,9	1097	69	25	0	0
1794	65	12,9	1097	69	25	0	0
1795	70	12,9	1094	71	27	0	0
1796	72	13,0	1108	69	24	0	0
1797	91	13,0	1108	69	24	0	0
1798	74	14,0	1180	81	26	0	0
1799	74	14,7	1252	83	24	0	0
1800	63	15,8	1347	86	28	0	0
1801	86	16,9	1438	94	29	0	0
1802	54	17,9	1532	98	32	0	0
1803	46	18,6	1587	101	33	0	0
1804	98	19,2	1642	104	34	0	0
1805	88	20,1	1709	112	35	0	0
1806	57	20,8	1782	110	36	0	0
1807	64	21,1	1807	109	38	0	0
1808	77	21,1	1807	109	38	0	0
1809	84	20,9	1787	117	34	0	0
1810	53	20,2	1736	106	34	0	0
1811	38	19,5	1687	101	31	0	0
1812	41	18,6	1602	98	31	0	0
1813	34	18,5	1580	101	33	0	0
1814	55	18,5	1580	101	33	0	0
1815	75	18,3	1563	100	34	0	0
1816	60	18,3	1563	100	34	0	0
1817	41	18,2	1569	96	29	0	0
1818	53	19,6	1658	111	38	0	0
1819	47	20,1	1720	106	37	0	0
1820	50	20,9	1776	114	40	0	0
1821	74	20,9	1776	114	40	0	0
1822	80	23,6	2010	131	42	0	0
1823	65	23,7	2027	130	41	0	0
1824	48	23,9	2045	130	41	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1825	91	23,9	2045	130	41	0	0
1826	81	23,8	2032	129	44	0	0
1827	100	23,8	2032	129	44	0	0
1828	74	23,2	1988	122	40	0	0
1829	68	24,2	2088	124	42	0	0
1830	71	24,7	2118	133	42	0	0
1831	92	19,2	1634	101	38	0	0
1832	85	20,6	1757	110	40	0	0
1833	70	20,6	1757	110	40	0	0
1834	90	20,6	1757	110	40	0	0
1835	87	20,6	1757	110	40	0	0
1836	80	21,7	1862	114	39	0	0
1837	75	21,7	1862	114	39	0	0
1838	89	20,9	1785	110	38	0	0
1839	97	20,9	1785	110	38	0	0
1840	60	16,6	1434	85	26	0	0
1841	50	16,6	1434	85	26	0	0
1842	85	16,6	1434	85	26	0	0
1843	90	11,9	1011	63	23	0	0
1844	74	7,6	654	38	14	0	0
1845	65	7,6	654	38	14	0	0
1846	80	4,7	410	24	8	0	0
1847	95	4,7	410	24	8	0	0
1848	50	14,8	1254	80	31	0	0
1849	48	13,8	1179	74	26	0	0
1850	67	13,0	1104	70	27	0	0
1851	48	13,0	1104	70	27	0	0
1852	97	12,6	1063	67	27	0	0
1853	114	12,6	1063	67	27	0	0
1854	88	12,2	1034	67	24	0	0
1855	60	12,7	1074	69	27	0	0
1856	97	12,7	1074	69	27	0	0
1857	81	13,3	1145	66	25	0	0
1858	81	14,8	1258	76	31	0	0
1859	85	14,8	1258	76	31	0	0
1860	67	16,2	1397	77	32	0	0
1861	84	17,4	1508	86	30	0	0
1862	102	17,4	1508	86	30	0	0
1863	95	17,4	1508	86	30	0	0
1864	85	18,5	1602	95	30	0	0
1865	129	19,3	1686	92	29	0	0
1866	131	19,3	1686	92	29	0	0
1867	103	21,2	1813	111	38	0	0
1868	120	22,6	1939	118	39	0	0
1869	100	22,6	1939	118	39	0	0
1870	128	22,6	1939	118	39	0	0
1871	121	23,6	2040	119	39	0	0
1872	124	23,6	2040	119	39	0	0
1873	111	24,8	2168	118	38	0	0
1874	85	24,8	2168	118	38	0	0
1875	112	26,3	2254	140	46	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1876	133	26,3	2254	140	46	0	0
1877	125	27,6	2381	135	50	0	0
1878	99	28,3	2446	140	50	0	0
1879	77	29,1	2511	144	50	0	0
1880	95	29,0	2511	144	49	0	0
1881	105	29,0	2511	144	49	0	0
1882	108	30,6	2638	159	49	0	0
1883	100	33,9	2909	178	58	0	0
1884	95	37,2	3181	198	67	0	0
1885	78	34,6	2968	182	60	0	0
1886	92	32,0	2746	166	56	0	0
1887	72	32,0	2746	166	56	0	0
1888	51	26,2	2264	138	41	0	0
1889	54	24,4	2093	128	45	0	0
1890	56	23,2	1990	124	38	0	0
1891	29	22,0	1901	110	38	0	0
1892	46	22,0	1885	113	42	0	0
1893	29	22,3	1914	117	38	0	0
1894	41	22,3	1925	119	35	0	0
1895	39	22,8	1962	121	37	0	0
1896	45	23,3	2012	122	38	0	0
1897	54	24,4	2106	123	42	0	0
1898	34	25,1	2151	136	42	0	0
1899	50	25,4	2196	133	40	0	0
1900	53	25,9	2226	134	44	0	0
1901	46	25,5	2203	130	43	0	0
1902	45	25,5	2203	130	43	0	0
1903	20	25,1	2153	139	41	0	0
1904	35	25,1	2153	139	41	0	0
1905	57	24,8	2136	128	41	0	0
1906	67	24,5	2093	140	38	0	0
1907	57	24,0	2076	126	37	0	0
1908	36	24,4	2102	127	42	0	0
1909	57	24,4	2102	127	42	0	0
1910	37	25,3	2176	131	44	0	0
1911	67	26,5	2276	144	43	0	0
1912	54	27,1	2336	140	44	0	0
1913	61	27,1	2336	140	44	0	0
1914	73	27,4	2375	137	43	0	0
1915	41	27,5	2367	150	40	0	0
1916	77	27,9	2418	140	43	0	0
1917	55	28,2	2420	153	46	0	0
1918	43	28,1	2418	148	46	0	0
1919	55	27,6	2386	143	45	0	0
1920	42	27,6	2369	152	45	0	0
1921	57	27,5	2383	141	43	0	0
1922	52	27,9	2409	145	44	0	0
1923	64	27,7	2391	148	40	0	0
1924	59	27,5	2389	140	41	0	0
1925	86	27,6	2392	141	44	0	0
1926	86	26,8	2330	132	42	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1927	67	26,8	2330	132	42	0	0
1928	55	26,7	2312	135	44	0	0
1929	61	26,2	2266	133	42	0	0
1930	37	25,7	2212	136	41	0	0
1931	42	25,7	2212	136	41	0	0
1932	55	25,8	2211	138	43	0	0
1933	36	25,9	2224	140	43	0	0
1934	48	26,0	2214	145	45	0	0
1935	47	25,6	2211	132	43	0	0
1936	55	25,5	2171	146	42	0	0
1937	42	24,7	2098	141	44	0	0
1938	40	25,6	2196	141	42	0	0
1939	50	25,5	2192	141	40	0	0
1940	48	25,6	2182	139	46	0	0
1941	40	26,7	2290	148	43	0	0
1942	42	27,4	2341	148	48	0	0
1943	50	27,4	2341	152	46	0	0
1944	42	27,4	2338	152	46	0	0
1945	39	16,8	1424	94	31	0	0
1946	39	20,0	1699	112	38	0	0
1947	50	20,0	1699	112	38	0	0
1948	80	12,0	1018	66	24	0	0
1949	66	12,2	1024	69	27	0	0
1950	70	12,3	1040	68	25	0	0
1951	73	12,3	1040	68	25	0	0
1952	70	12,9	1100	64	27	0	0
1953	69	13,8	1171	76	25	0	0
1954	76	15,1	1284	80	30	0	0
1955	70	16,7	1440	82	30	0	0
1956	61	18,4	1578	101	31	0	0
1957	65	20,1	1736	105	33	0	0
1958	72	20,1	1736	105	33	0	0
1959	75	21,8	1888	114	32	0	0
1960	60	23,4	2025	122	36	0	0
1961	61	25,8	2213	134	48	0	0
1962	45	25,9	2242	129	44	0	0
1963	63	25,9	2242	129	44	0	0
1964	66	26,4	2252	138	51	0	0
1965	67	26,0	2236	132	46	0	0
1966	63	25,4	2176	132	47	0	0
1967	61	25,4	2176	132	47	0	0
1968	70	23,2	1990	124	38	0	0
1969	75	22,0	1901	110	38	0	0
1970	58	22,0	1885	113	42	0	0
1971	60	22,3	1914	117	38	0	0
1972	50	22,3	1925	119	35	0	0
1973	45	22,8	1962	121	37	0	0
1974	50	23,3	2012	122	38	0	0
1975	65	24,4	2106	123	42	0	0
1976	85	25,1	2151	136	42	0	0
1977	70	25,4	2196	133	40	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
1978	57	25,9	2226	134	44	0	0
1979	78	25,5	2203	130	43	0	0
1980	62	25,5	2203	130	43	0	0
1981	74	25,1	2153	139	41	0	0
1982	71	25,1	2153	139	41	0	0
1983	77	24,8	2136	128	41	0	0
1984	60	24,5	2093	140	38	0	0
1985	62	18,1	1593	83	24	0	0
1986	71	19,2	1712	78	26	0	0
1987	67	23,2	2068	97	28	0	0
1988	66	25,3	2262	108	28	0	0
1989	78	25,3	2262	108	28	0	0
1990	97	27,2	2444	110	28	0	0
1991	70	29,8	2667	122	33	0	0
1992	75	31,9	2852	137	34	0	0
1993	85	31,9	2852	137	34	0	0
1994	78	33,5	2991	150	34	0	0
1995	74	34,9	3106	149	42	0	0
1996	74	36,4	3240	160	40	0	0
1997	91	36,4	3240	160	40	0	0
1998	86	37,4	3336	158	44	0	0
1999	59	37,4	3336	158	44	0	0
2000	75	37,8	3379	162	40	0	0
2001	85	38,6	3452	164	43	0	0
2002	84	39,7	3540	169	48	0	0
2003	69	40,1	3582	174	42	0	0
2004	91	40,1	3582	174	42	0	0
2005	73	40,2	3610	166	43	0	0
2006	53	40,2	3601	172	40	0	0
2007	80	40,2	3601	172	40	0	0
2008	69	40,2	3601	172	40	0	0
2009	79	40,3	3590	178	46	0	0
2010	85	40,0	3578	173	42	0	0
2011	73	39,2	3486	173	46	0	0
2012	54	36,3	3238	157	42	0	0
2013	60	34,3	3049	152	39	0	0
2014	58	33,9	3016	152	39	0	0
2015	60	34,1	3016	160	41	0	0
2016	70	34,0	3000	160	41	0	0
2017	67	32,7	2893	150	38	0	0
2018	59	32,4	2869	150	38	0	0
2019	42	32,1	2834	150	40	0	0
2020	50	32,0	2821	149	40	0	0
2021	45	44,4	3876	215	66	0	0
2022	39	44,8	3908	215	68	0	0
2023	45	43,2	3767	205	69	0	0
2024	55	40,9	3544	208	62	0	0
2025	75	38,9	3407	188	55	0	0
2026	82	37,5	3284	180	54	0	0
2027	75	37,5	3284	180	54	0	0
2028	89	33,2	2895	163	48	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2029	94	33,2	2895	163	48	0	0
2030	90	30,2	2636	148	44	0	0
2031	83	30,2	2636	148	44	0	0
2032	67	27,8	2448	130	37	0	0
2033	60	28,1	2468	127	42	0	0
2034	71	29,6	2587	144	42	0	0
2035	87	29,6	2587	144	42	0	0
2036	83	31,0	2760	133	36	0	0
2037	60	32,5	2858	147	47	0	0
2038	63	31,0	2744	136	40	0	0
2039	63	30,2	2672	132	42	0	0
2040	90	14,3	1229	74	24	0	0
2041	68	14,2	1238	70	22	0	0
2042	68	14,4	1243	73	26	0	0
2043	64	14,9	1302	71	24	0	0
2044	50	16,8	1467	82	25	0	0
2045	50	19,1	1654	93	32	0	0
2046	83	19,1	1654	93	32	0	0
2047	91	21,0	1849	91	31	0	0
2048	78	22,6	1985	102	33	0	0
2049	81	23,9	2119	108	29	0	0
2050	83	23,9	2119	108	29	0	0
2051	70	25,1	2218	110	34	0	0
2052	71	25,3	2262	103	30	0	0
2053	90	25,3	2262	103	30	0	0
2054	80	25,8	2310	108	29	0	0
2055	77	26,1	2334	110	28	0	0
2056	71	26,9	2410	107	34	0	0
2057	74	26,9	2410	107	34	0	0
2058	74	28,0	2510	113	31	0	0
2059	71	29,6	2657	117	35	0	0
2060	75	29,6	2657	117	35	0	0
2061	69	31,3	2824	121	34	0	0
2062	55	34,0	3082	127	34	0	0
2063	60	34,0	3082	127	34	0	0
2064	65	34,0	3082	127	34	0	0
2065	70	38,5	3453	155	42	0	0
2066	85	41,5	3744	164	42	0	0
2067	96	44,2	3988	176	44	0	0
2068	58	46,6	4198	184	49	0	0
2069	83	46,6	4198	184	49	0	0
2070	77	47,9	4292	199	50	0	0
2071	68	48,4	4361	189	52	0	0
2072	48	49,1	4403	200	53	0	0
2073	56	49,6	4476	190	52	0	0
2074	45	50,2	4500	207	55	0	0
2075	46	50,3	4508	209	53	0	0
2076	56	50,2	4499	208	55	0	0
2077	78	49,6	4440	208	54	0	0
2078	55	49,0	4392	204	53	0	0
2079	60	48,5	4344	200	53	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2080	64	47,6	4254	199	53	0	0
2081	68	46,9	4185	200	53	0	0
2082	68	46,2	4116	202	52	0	0
2083	55	43,0	3830	182	52	0	0
2084	45	41,6	3683	184	54	0	0
2085	34	39,8	3523	178	49	0	0
2086	57	38,3	3380	179	48	0	0
2087	57	38,3	3380	179	48	0	0
2088	66	37,6	3324	174	45	0	0
2089	61	37,3	3307	168	45	0	0
2090	39	37,0	3275	170	43	0	0
2091	81	37,6	3327	172	46	0	0
2092	54	37,7	3323	174	49	0	0
2093	62	37,1	3285	165	46	0	0
2094	61	36,6	3266	159	41	0	0
2095	66	37,4	3308	163	50	0	0
2096	76	37,6	3308	163	50	0	0
2097	67	37,6	3305	165	47	0	0
2098	42	37,7	3306	170	46	0	0
2099	61	36,6	3210	169	46	0	0
2100	65	35,4	3099	169	42	0	0
2101	57	32,6	2879	147	35	0	0
2102	50	30,2	2677	128	35	0	0
2103	67	30,5	2677	136	38	0	0
2104	69	30,4	2670	136	40	0	0
2105	89	31,8	2801	139	40	0	0
2106	65	28,6	2501	136	36	0	0
2107	54	19,8	1740	87	24	0	0
2108	42	19,0	1668	83	24	0	0
2109	60	23,0	2011	106	30	0	0
2110	48	26,2	2308	115	33	0	0
2111	46	28,0	2464	125	33	0	0
2112	46	29,1	2570	125	34	0	0
2113	67	29,1	2570	125	34	0	0
2114	41	25,0	2198	110	31	0	0
2115	66	21,9	1927	90	29	0	0
2116	80	29,6	2657	117	35	0	0
2117	49	31,3	2824	121	34	0	0
2118	33	34,0	3082	127	34	0	0
2119	50	34,0	3082	127	34	0	0
2120	70	34,0	3082	127	34	0	0
2121	65	38,5	3453	155	42	0	0
2122	114	41,5	3744	164	42	0	0
2123	103	44,2	3988	176	44	0	0
2124	134	46,6	4198	184	49	0	0
2125	134	48,4	4361	189	52	0	0
2126	130	49,1	4403	200	53	0	0
2127	111	49,6	4476	190	52	0	0
2128	93	50,2	4500	207	55	0	0
2129	75	50,3	4508	209	53	0	0
2130	85	50,2	4499	208	55	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2131	120	49,6	4440	208	54	0	0
2132	90	49,0	4392	204	53	0	0
2133	85	48,5	4344	200	53	0	0
2134	115	47,6	4254	199	53	0	0
2135	99	46,9	4185	200	53	0	0
2136	111	46,2	4116	202	52	0	0
2137	112	43,1	3830	182	52	0	0
2138	122	39,9	3523	178	49	0	0
2139	100	38,5	3380	179	48	0	0
2140	120	38,3	3380	179	48	0	0
2141	135	37,6	3324	174	45	0	0
2142	133	37,3	3307	168	45	0	0
2143	127	37,1	3275	170	43	0	0
2144	100	37,2	3285	165	46	0	0
2145	110	36,8	3266	159	41	0	0
2146	108	37,4	3308	163	50	0	0
2147	140	37,5	3308	163	50	0	0
2148	103	37,5	3305	165	47	0	0
2149	139	36,6	3210	169	46	0	0
2150	100	35,3	3099	169	42	0	0
2151	123	32,4	2879	147	35	0	0
2152	130	30,0	2677	128	35	0	0
2153	138	30,2	2677	136	38	0	0
2154	120	30,2	2670	136	40	0	0
2155	110	31,6	2801	139	40	0	0
2156	115	28,4	2501	136	36	0	0
2157	131	19,8	1740	87	24	0	0
2158	143	19,0	1668	83	24	0	0
2159	141	23,0	2011	106	30	0	0
2160	115	26,0	2308	115	33	0	0
2161	106	27,8	2464	125	33	0	0
2162	120	28,9	2570	125	34	0	0
2163	120	29,1	2570	125	34	0	0
2164	147	25,0	2198	110	31	0	0
2165	148	21,9	1927	90	29	0	0
2166	149	30,1	2657	117	35	0	0
2167	120	31,8	2824	121	34	0	0
2168	98	34,0	3082	127	34	0	0
2169	80	34,0	3082	127	34	0	0
2170	110	34,0	3082	127	34	0	0
2171	100	38,5	3453	155	42	0	0
2172	124	32,6	3099	54	16	0	0
2173	148	30,3	2879	50	16	0	0
2174	115	28,3	2677	50	16	0	0
2175	110	27,8	2677	47	7	0	0
2176	109	27,7	2670	47	7	0	0
2177	131	29,2	2801	49	12	0	0
2178	143	26,2	2501	49	12	0	0
2179	141	18,6	1740	49	12	0	0
2180	158	18,0	1668	50	15	0	0
2181	120	21,4	2011	50	15	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2182	110	24,4	2308	49	16	0	0
2183	95	26,0	2464	49	16	0	0
2184	132	27,2	2570	53	20	0	0
2185	116	27,2	2570	53	20	0	0
2186	120	23,5	2198	53	20	0	0
2187	110	12,9	1124	58	21	0	0
2188	124	13,0	1139	59	20	0	0
2189	140	13,0	1139	59	20	0	0
2190	139	12,3	1075	56	18	0	0
2191	153	12,3	1075	56	18	0	0
2192	166	12,4	1075	56	18	0	0
2193	135	12,4	1075	56	18	0	0
2194	140	12,0	1023	58	20	0	0
2195	136	12,0	1023	58	20	0	0
2196	120	11,4	998	52	19	0	0
2197	90	11,4	998	52	19	0	0
2198	141	11,5	1010	50	17	0	0
2199	137	11,5	1010	50	17	0	0
2200	110	11,2	982	47	8	0	0
2201	110	18,4	1610	87	28	0	0
2202	120	18,4	1610	87	28	0	0
2203	115	16,8	1458	81	27	0	0
2204	116	16,8	1458	81	27	0	0
2205	120	15,2	1323	69	27	0	0
2206	116	15,2	1323	69	27	0	0
2207	121	13,9	1205	68	24	0	0
2208	122	13,9	1205	68	24	0	0
2209	122	14,1	1205	68	24	0	0
2210	110	12,8	1096	57	22	0	0
2211	116	12,8	1096	57	22	0	0
2212	132	11,5	997	55	21	0	0
2213	124	11,5	997	55	21	0	0
2214	146	10,7	928	51	18	0	0
2215	151	10,7	928	51	18	0	0
2216	173	10,7	928	51	18	0	0
2217	123	10,1	883	45	17	0	0
2218	129	10,1	883	45	17	0	0
2219	133	10,1	883	45	17	0	0
2220	133	9,8	860	45	15	0	0
2221	108	9,8	860	45	15	0	0
2222	123	10,4	896	52	19	0	0
2223	95	10,4	896	52	19	0	0
2224	141	10,4	896	52	19	0	0
2225	145	10,4	913	47	17	0	0
2226	120	10,9	913	47	17	0	0
2227	155	11,4	962	48	17	0	0
2228	72	11,4	962	48	17	0	0
2229	86	11,9	1025	53	18	0	0
2230	95	11,7	1025	53	18	0	0
2231	100	12,5	1092	55	22	0	0
2232	113	12,5	1092	55	22	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2233	92	13,1	1140	58	23	0	0
2234	96	13,2	1140	58	23	0	0
2235	104	13,7	1188	60	22	0	0
2236	109	14,1	1236	59	24	0	0
2237	91	14,2	1236	59	24	0	0
2238	98	14,3	1236	59	24	0	0
2239	106	14,6	1264	62	24	0	0
2240	95	14,8	1284	67	25	0	0
2241	115	14,7	1284	67	25	0	0
2242	116	14,7	1284	67	25	0	0
2243	120	14,8	1317	60	21	0	0
2244	116	14,8	1317	60	21	0	0
2245	121	15,1	1317	60	21	0	0
2246	122	15,3	1324	64	26	0	0
2247	122	15,3	1324	64	26	0	0
2248	110	15,3	1324	64	26	0	0
2249	116	15,2	1320	62	26	4	0
2250	132	15,5	1334	70	25	6	0
2251	124	15,6	1334	70	25	6	0
2252	146	15,7	1334	70	25	6	0
2253	151	15,4	1332	58	24	4	0
2254	173	15,4	1332	58	24	4	0
2255	123	15,1	1337	71	12	4	0
2256	129	15,3	1337	71	12	4	0
2257	133	15,6	1337	71	12	4	0
2258	133	15,9	1365	60	19	5	0
2259	108	15,9	1365	60	19	5	0
2260	123	15,6	1386	64	23	0	0
2261	95	15,6	1386	64	23	0	0
2262	72	15,6	1386	64	23	0	0
2263	86	15,8	1409	60	23	0	0
2264	95	15,9	1409	60	23	0	0
2265	100	16,0	1409	60	23	0	0
2266	98	16,5	1444	70	24	0	0
2267	106	16,5	1444	70	24	0	0
2268	176	16,5	1444	70	24	0	0
2269	172	16,5	1444	70	24	0	0
2270	144	16,6	1464	67	24	0	0
2271	120	16,5	1464	67	24	0	0
2272	53	16,8	1464	67	24	0	0
2273	120	17,7	1513	74	29	5	0
2274	146	17,7	1513	74	29	5	0
2275	161	19,5	1710	75	28	0	0
2276	89	21,8	1904	89	32	0	0
2277	69	21,8	1904	89	32	0	0
2278	120	23,7	2109	94	35	0	0
2279	150	23,7	2109	94	35	0	0
2280	175	23,7	2109	94	35	0	0
2281	161	26,1	2332	104	35	0	0
2282	183	26,1	2332	104	35	0	0
2283	148	26,1	2332	104	35	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2284	169	29,3	2619	119	36	0	0
2285	120	29,3	2619	119	36	0	0
2286	170	30,0	2619	119	36	0	0
2287	153	41,4	3689	153	46	4	0
2288	200	41,8	3762	142	47	0	0
2289	199	41,8	3762	142	47	0	0
2290	145	41,8	3762	142	47	0	0
2291	148	43,5	3913	154	47	0	0
2292	186	43,5	3913	154	47	0	0
2293	150	43,5	3913	154	47	0	0
2294	110	43,5	3913	154	47	0	0
2295	109	45,7	4080	163	45	7	0
2296	169	45,7	4080	163	45	7	0
2297	150	45,7	4080	163	45	7	0
2298	120	45,7	4080	163	45	7	0
2299	201	45,7	4080	163	45	7	0
2300	187	46,7	4140	154	48	5	0
2301	166	37,6	3320	142	52	5	0
2302	120	37,6	3320	142	52	5	0
2303	193	37,6	3320	142	52	5	0
2304	196	37,6	3320	142	52	5	0
2305	189	33,5	2960	118	42	5	0
2306	188	26,7	2368	107	37	4	0
2307	93	26,7	2368	107	37	4	0
2308	167	26,7	2368	107	37	4	0
2309	169	24,5	2165	87	34	5	0
2310	155	24,5	2165	87	34	5	0
2311	157	24,8	2165	87	34	5	0
2312	155	23,3	2007	91	35	6	0
2313	185	23,3	2007	91	35	6	0
2314	157	23,3	2007	91	35	6	0
2315	127	20,7	1810	76	31	5	0
2316	65	19,6	1732	71	29	5	0
2317	93	19,6	1732	71	29	5	0
2318	104	19,7	1704	83	29	6	0
2319	108	19,7	1704	83	29	6	0
2320	68	19,3	1690	76	32	6	0
2321	123	19,3	1690	76	32	6	0
2322	81	18,5	1642	77	25	0	0
2323	105	18,5	1642	77	25	0	0
2324	94	18,2	1614	72	27	0	0
2325	115	18,2	1616	76	26	0	0
2326	89	18,2	1616	76	26	0	0
2327	125	18,0	1581	73	24	0	0
2328	160	18,0	1581	73	24	0	0
2329	131	18,0	1581	73	24	0	0
2330	131	17,7	1560	69	25	4	0
2331	117	17,9	1560	69	25	4	0
2332	116	17,9	1527	78	30	5	0
2333	119	17,9	1527	78	30	5	0
2334	119	17,9	1527	78	30	5	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2335	128	18,0	1527	78	30	5	0
2336	133	17,2	1494	70	26	0	0
2337	143	17,2	1494	70	26	0	0
2338	125	17,0	1500	68	29	0	0
2339	112	17,0	1500	68	29	0	0
2340	160	17,0	1500	68	29	0	0
2341	117	17,0	1492	71	28	0	0
2342	141	17,0	1492	71	28	0	0
2343	128	17,3	1520	70	31	0	0
2344	140	17,3	1520	70	31	0	0
2345	140	17,3	1520	70	31	0	0
2346	65	17,7	1539	73	28	0	0
2347	138	18,2	1562	76	30	5	0
2348	122	18,2	1562	76	30	5	0
2349	130	18,5	1621	78	34	0	0
2350	114	18,5	1621	78	34	0	0
2351	136	18,9	1651	85	32	0	0
2352	140	18,9	1651	85	32	0	0
2353	146	18,6	1636	81	30	0	0
2354	100	18,8	1636	81	30	0	0
2355	82	18,8	1640	77	32	0	0
2356	122	19,7	1680	90	34	4	0
2357	120	19,7	1680	90	34	4	0
2358	128	19,7	1680	90	34	4	0
2359	131	19,6	1708	82	33	5	0
2360	133	19,6	1708	82	33	5	0
2361	132	20,1	1724	89	38	7	0
2362	135	20,3	1724	89	38	7	0
2363	123	20,5	1724	89	38	7	0
2364	152	19,8	1681	83	37	4	0
2365	141	19,8	1681	83	37	4	0
2366	140	20,1	1639	92	37	8	6
2367	132	20,1	1639	92	37	8	6
2368	149	18,8	1594	80	32	7	0
2369	110	18,8	1594	80	32	7	0
2370	160	18,8	1594	80	32	7	0
2371	139	17,9	1542	81	29	6	0
2372	130	17,9	1542	81	29	6	0
2373	154	17,7	1517	80	30	3	0
2374	194	17,7	1491	79	32	4	0
2375	207	17,4	1452	80	34	4	0
2376	166	17,4	1452	80	34	4	0
2377	170	17,5	1468	77	34	8	0
2378	169	17,5	1468	77	34	8	0
2379	163	17,5	1468	77	34	8	0
2380	198	17,4	1490	80	32	0	0
2381	162	17,4	1490	80	32	0	0
2382	154	17,4	1490	80	32	0	0
2383	171	17,1	1461	79	33	0	0
2384	163	17,1	1453	80	31	0	0
2385	194	17,5	1463	80	31	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2386	186	17,8	1473	80	31	0	0
2387	162	17,6	1473	78	30	0	0
2388	194	17,5	1473	75	30	0	0
2389	186	17,5	1473	76	30	0	0
2390	186	17,6	1473	77	30	0	0
2391	181	17,1	1464	77	30	0	0
2392	148	15,9	1368	74	26	0	0
2393	99	16,0	1368	74	29	0	0
2394	171	15,6	1331	73	29	0	0
2395	150	15,2	1295	71	29	0	0
2396	94	18,4	1537	87	36	0	0
2397	108	5,3	418	30	13	5	0
2398	215	4,9	401	30	13	0	0
2399	211	4,9	401	30	13	0	0
2400	248	4,7	388	28	11	0	0
2401	231	4,4	374	25	8	0	0
2402	250	4,4	374	25	8	0	0
2403	222	4,4	374	25	8	0	0
2404	208	4,4	374	25	8	0	0
2405	210	4,3	369	19	11	0	0
2406	239	4,3	369	19	11	0	0
2407	229	4,3	369	19	11	0	0
2408	232	4,3	369	19	11	0	0
2409	240	4,1	352	23	6	0	0
2410	187	4,1	352	23	6	0	0
2411	242	4,1	352	23	6	0	0
2412	224	4,1	352	23	6	0	0
2413	216	4,1	358	16	7	0	0
2414	217	4,1	358	16	7	0	0
2415	237	4,3	368	20	9	0	0
2416	215	4,5	377	23	11	0	0
2417	202	4,5	377	23	11	0	0
2418	214	4,5	377	23	11	0	0
2419	207	4,6	393	24	10	0	0
2420	213	4,6	393	24	10	0	0
2421	231	4,6	393	24	10	0	0
2422	228	5,1	438	26	9	0	0
2423	215	5,1	438	26	9	0	0
2424	232	5,1	438	26	9	0	0
2425	220	5,1	438	26	9	0	0
2426	228	5,6	474	30	11	0	0
2427	238	5,6	474	30	11	0	0
2428	219	5,6	474	30	11	0	0
2429	250	5,6	474	30	11	0	0
2430	239	5,6	474	30	11	0	0
2431	254	5,8	502	28	12	0	0
2432	217	5,8	502	28	12	0	0
2433	231	5,8	502	28	12	0	0
2434	239	5,8	502	28	12	0	0
2435	256	6,4	550	31	14	0	0
2436	208	6,4	550	31	14	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2437	216	6,4	550	31	14	0	0
2438	249	6,4	550	31	14	0	0
2439	240	7,0	623	38	5	0	0
2440	168	7,0	623	38	5	0	0
2441	187	7,0	623	38	5	0	0
2442	154	7,7	664	36	16	0	0
2443	171	7,7	664	36	16	0	0
2444	161	8,0	664	36	16	0	0
2445	188	8,7	730	40	17	0	0
2446	186	8,7	730	40	17	0	0
2447	169	8,7	730	40	17	0	0
2448	197	8,7	730	40	17	0	0
2449	247	9,3	798	41	18	0	0
2450	216	9,2	798	41	18	0	0
2451	148	9,5	820	44	20	0	0
2452	166	9,5	820	44	20	0	0
2453	174	9,6	820	44	20	0	0
2454	218	9,7	820	44	20	0	0
2455	215	10,2	865	49	19	0	0
2456	205	10,2	865	49	19	0	0
2457	247	10,2	865	49	19	0	0
2458	165	10,5	914	46	19	0	0
2459	155	10,5	914	46	19	0	0
2460	174	11,6	1012	55	18	0	0
2461	164	11,6	1012	55	18	0	0
2462	229	11,6	1012	55	18	0	0
2463	215	11,6	1012	55	18	0	0
2464	202	13,4	1157	64	25	0	0
2465	177	13,4	1157	64	25	0	0
2466	216	14,4	1230	70	26	0	0
2467	189	15,4	1303	77	28	0	0
2468	219	15,4	1303	77	28	0	0
2469	188	15,6	1303	77	28	0	0
2470	208	15,8	1303	77	28	0	0
2471	201	17,4	1441	77	34	0	0
2472	155	17,4	1441	77	34	0	0
2473	223	18,4	1576	81	33	0	0
2474	198	18,1	1576	81	33	0	0
2475	209	20,1	1730	86	35	0	0
2476	172	20,1	1730	86	35	0	0
2477	172	20,1	1730	86	35	0	0
2478	210	21,2	1820	95	36	0	0
2479	215	22,3	1910	104	37	0	0
2480	225	22,3	1910	104	37	0	0
2481	232	22,3	1910	104	37	0	0
2482	210	22,3	1910	104	37	0	0
2483	210	24,0	2092	96	40	0	0
2484	198	23,9	2092	96	40	0	0
2485	200	23,9	2092	96	40	0	0
2486	202	25,2	2186	105	40	3	0
2487	203	26,6	2281	114	40	6	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2488	204	35,8	3175	134	47	4	0
2489	205	43,8	3922	147	54	6	0
2490	201	43,8	3922	147	54	6	0
2491	201	22,3	1828	104	41	5	0
2492	225	13,1	1037	57	26	5	0
2493	215	12,1	975	53	28	4	0
2494	187	11,8	953	53	28	8	0
2495	213	11,8	953	53	28	8	0
2496	212	11,8	953	53	28	8	0
2497	229	11,1	914	54	25	4	0
2498	221	10,9	914	54	25	4	0
2499	275	10,9	914	54	25	4	0
2500	238	10,9	914	54	25	4	0
2501	288	10,3	875	47	21	4	0
2502	225	10,3	875	47	21	4	0
2503	259	10,4	875	47	21	4	0
2504	277	10,5	875	47	21	4	0
2505	184	10,3	861	48	25	0	0
2506	211	10,3	861	48	25	0	0
2507	222	10,3	861	48	25	0	0
2508	214	10,2	880	45	23	0	0
2509	227	10,2	880	45	23	0	0
2510	204	10,2	880	45	23	0	0
2511	212	10,2	880	45	23	0	0
2512	239	10,5	887	45	23	3	0
2513	225	10,8	894	45	22	6	0
2514	210	10,8	894	45	22	6	0
2515	265	10,8	894	45	22	6	0
2516	239	10,9	912	47	22	3	0
2517	228	10,9	930	48	21	0	0
2518	244	10,9	930	48	21	0	0
2519	245	10,9	930	48	21	0	0
2520	241	11,4	975	53	24	0	0
2521	255	11,9	1019	57	27	0	0
2522	254	11,9	1019	57	27	0	0
2523	233	12,9	1089	60	26	2	0
2524	223	13,9	1158	62	25	5	0
2525	243	13,9	1158	62	25	5	0
2526	244	13,9	1158	62	25	5	0
2527	228	13,9	1158	62	25	5	0
2528	245	13,9	1158	62	25	5	0
2529	233	15,1	1267	68	28	7	0
2530	261	16,3	1376	73	31	10	0
2531	247	16,5	1376	73	31	10	0
2532	213	17,9	1525	74	32	8	0
2533	241	19,4	1674	75	32	6	0
2534	222	19,4	1674	75	32	6	0
2535	277	19,4	1674	75	32	6	0
2536	222	21,1	1838	81	34	7	0
2537	273	22,9	2002	88	36	8	0
2538	197	22,9	2002	88	36	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2539	208	24,5	2170	91	36	4	0
2540	216	26,2	2339	94	36	5	0
2541	242	26,4	2339	94	36	5	0
2542	239	26,6	2339	94	36	5	0
2543	198	28,0	2459	103	40	4	0
2544	245	29,6	2579	112	43	8	0
2545	216	29,6	2579	112	43	8	0
2546	245	29,7	2579	112	43	8	0
2547	242	31,5	2737	122	43	8	0
2548	228	31,5	2737	122	43	8	0
2549	238	31,5	2737	122	43	8	0
2550	225	31,9	2801	121	44	7	0
2551	266	32,5	2864	121	45	7	0
2552	243	32,5	2864	121	45	7	0
2553	216	32,5	2864	121	45	7	0
2554	245	33,8	2956	121	48	10	0
2555	212	34,3	2956	127	50	12	0
2556	191	34,3	2984	128	50	6	0
2557	226	34,5	3012	129	51	4	0
2558	170	34,7	3012	129	51	4	0
2559	176	34,5	3002	136	54	4	0
2560	159	34,5	3002	136	54	4	0
2561	197	34,2	2973	139	54	5	0
2562	216	34,0	2945	142	55	6	0
2563	192	34,3	2945	142	55	6	0
2564	221	33,4	2872	135	53	6	0
2565	215	32,6	2799	128	52	7	0
2566	202	31,8	2716	138	56	5	0
2567	197	31,8	2716	138	56	5	0
2568	273	31,8	2716	138	56	5	0
2569	209	30,8	2645	128	54	4	0
2570	242	30,9	2645	128	54	4	0
2571	225	31,0	2645	128	54	4	0
2572	250	30,5	2620	126	53	4	0
2573	205	30,1	2594	124	52	5	0
2574	237	30,2	2594	124	52	5	0
2575	261	30,3	2594	124	52	5	0
2576	222	29,5	2522	126	52	2	0
2577	285	28,9	2451	129	52	3	0
2578	280	23,7	2020	105	43	2	0
2579	283	18,6	1589	81	34	0	0
2580	266	17,0	1467	75	31	0	0
2581	255	15,4	1345	68	27	0	0
2582	189	16,0	1345	70	32	5	0
2583	255	15,8	1329	70	32	5	0
2584	186	15,7	1314	70	32	5	0
2585	135	16,6	1380	71	31	5	0
2586	138	16,6	1380	71	31	5	0
2587	173	31,6	2626	139	62	7	0
2588	198	17,0	1445	74	34	8	0
2589	100	17,0	1416	77	36	6	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2590	122	16,4	1384	79	30	0	0
2591	117	16,4	1384	79	30	0	0
2592	152	16,3	1363	70	30	0	0
2593	147	16,3	1363	70	30	0	0
2594	152	16,3	1363	70	30	0	0
2595	174	15,9	1338	74	28	0	0
2596	162	15,8	1338	74	28	0	0
2597	178	15,8	1338	74	28	0	0
2598	179	15,7	1321	68	32	0	0
2599	166	15,7	1321	68	32	0	0
2600	149	15,7	1321	68	32	0	0
2601	170	15,9	1317	72	31	0	0
2602	146	15,9	1317	72	31	0	0
2603	154	16,1	1325	78	33	0	0
2604	144	16,1	1325	78	33	0	0
2605	155	16,1	1325	78	33	0	0
2606	139	15,9	1351	72	33	0	0
2607	116	15,9	1351	72	33	0	0
2608	142	16,0	1361	73	32	5	0
2609	145	16,0	1361	73	32	5	0
2610	155	16,3	1361	73	32	5	0
2611	152	16,6	1383	78	35	4	0
2612	168	16,6	1383	78	35	4	0
2613	170	17,0	1438	78	33	5	0
2614	159	17,0	1438	78	33	5	0
2615	156	17,0	1438	78	33	5	0
2616	189	17,0	1452	80	32	0	0
2617	158	17,0	1452	80	32	0	0
2618	136	17,4	1490	75	35	0	0
2619	152	17,4	1490	75	35	0	0
2620	180	17,4	1490	75	35	0	0
2621	147	18,1	1534	84	39	0	0
2622	145	18,1	1534	84	39	0	0
2623	129	18,1	1534	84	39	0	0
2624	148	18,2	1560	82	35	0	0
2625	164	18,2	1560	82	35	0	0
2626	166	19,1	1648	83	35	0	0
2627	151	19,1	1648	83	35	0	0
2628	153	19,3	1648	83	35	0	0
2629	152	20,4	1706	86	40	11	0
2630	164	20,4	1706	86	40	11	0
2631	162	20,4	1706	86	40	11	0
2632	170	21,2	1789	98	42	7	0
2633	171	21,2	1789	98	42	7	0
2634	195	21,2	1789	98	42	7	0
2635	165	22,3	1902	91	45	5	0
2636	161	22,3	1902	91	45	5	0
2637	169	22,4	1902	91	45	5	0
2638	179	23,4	1980	101	47	5	0
2639	176	23,4	1980	101	47	5	0
2640	173	24,9	2079	111	49	4	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2641	192	24,9	2079	111	49	4	0
2642	185	24,9	2079	111	49	4	0
2643	160	25,5	2157	114	54	7	0
2644	169	25,5	2157	114	54	7	0
2645	174	25,8	2157	114	54	7	0
2646	162	26,1	2196	119	50	5	0
2647	147	26,4	2213	118	52	5	0
2648	163	26,6	2231	117	54	5	0
2649	189	26,9	2248	115	56	7	0
2650	163	27,1	2259	118	56	7	0
2651	158	27,3	2269	121	56	8	0
2652	154	27,5	2280	123	57	8	0
2653	131	27,4	2307	118	56	5	0
2654	141	27,3	2305	115	55	4	0
2655	164	28,0	2307	118	56	7	0
2656	145	27,9	2298	128	60	7	0
2657	150	27,9	2298	128	60	7	0
2658	148	27,3	2285	119	56	6	0
2659	101	27,6	2285	119	56	6	0
2660	126	27,5	2289	117	52	7	0
2661	124	26,8	2260	130	52	6	0
2662	91	27,1	2260	130	52	6	0
2663	137	26,2	2208	109	50	8	0
2664	151	26,2	2208	109	50	8	0
2665	160	25,8	2193	109	50	4	0
2666	200	25,6	2178	109	49	4	0
2667	179	25,6	2178	109	49	4	0
2668	223	25,6	2178	109	49	5	0
2669	200	25,7	2157	113	51	5	0
2670	202	25,8	2136	117	52	4	0
2671	189	25,3	2106	115	50	5	0
2672	190	25,0	2076	113	47	11	0
2673	161	23,2	1985	90	40	5	0
2674	170	22,7	1943	92	40	3	0
2675	166	22,4	1902	94	40	4	0
2676	170	22,6	1902	94	40	4	0
2677	179	31,5	2611	136	59	5	0
2678	210	32,0	2611	136	59	6	0
2679	168	34,2	2791	152	71	11	0
2680	178	32,8	2705	151	69	10	0
2681	197	32,9	2705	151	69	10	0
2682	178	32,9	2705	151	69	10	0
2683	125	30,8	2556	138	67	5	0
2684	276	30,6	2556	138	67	5	0
2685	250	30,7	2556	138	67	5	0
2686	183	28,8	2416	127	58	6	0
2687	199	28,8	2416	127	58	6	0
2688	234	28,8	2416	127	58	6	0
2689	241	28,3	2363	127	58	7	0
2690	225	27,8	2310	128	58	8	0
2691	218	27,8	2310	128	58	8	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2692	204	27,8	2310	128	58	8	0
2693	152	27,4	2278	116	54	7	0
2694	163	27,4	2278	116	54	7	0
2695	167	27,6	2275	116	55	9	0
2696	167	27,6	2275	116	55	9	0
2697	147	27,6	2275	116	55	9	0
2698	201	28,1	2329	134	56	9	0
2699	212	28,1	2329	134	56	9	0
2700	181	28,1	2329	134	56	9	0
2701	174	29,4	2431	125	60	6	5
2702	167	29,4	2431	125	60	6	5
2703	177	29,4	2431	125	60	6	5
2704	163	29,4	2431	125	60	6	5
2705	204	29,8	2494	133	62	12	0
2706	186	30,0	2494	133	62	12	0
2707	206	30,2	2494	133	62	12	0
2708	206	30,7	2571	125	64	11	0
2709	189	30,7	2571	125	64	11	0
2710	189	31,5	2628	131	64	6	8
2711	179	31,5	2628	131	64	6	8
2712	201	31,5	2628	131	64	6	8
2713	141	31,5	2628	131	64	6	8
2714	179	31,8	2682	136	61	0	0
2715	154	31,8	2682	136	61	0	0
2716	168	31,8	2682	136	61	0	0
2717	150	32,1	2745	140	59	0	0
2718	136	31,9	2745	140	59	0	0
2719	155	31,9	2745	140	59	0	0
2720	169	33,9	2878	140	63	0	0
2721	161	33,9	2878	140	63	0	0
2722	145	34,5	2878	140	63	0	0
2723	195	36,2	2999	150	69	9	0
2724	191	36,2	2999	150	69	9	0
2725	159	36,4	2999	150	69	9	0
2726	165	37,7	3206	148	66	5	0
2727	193	37,7	3206	148	66	5	0
2728	188	38,9	3316	154	70	5	3
2729	186	40,2	3426	159	74	5	6
2730	232	40,4	3426	159	74	5	6
2731	231	40,6	3426	159	74	5	6
2732	164	43,5	3674	175	78	5	7
2733	135	43,5	3674	175	78	5	7
2734	154	46,1	3962	182	88	16	0
2735	155	46,1	3962	182	88	16	0
2736	157	47,0	3962	182	88	16	0
2737	162	49,6	4217	193	87	13	0
2738	187	49,6	4217	193	87	13	0
2739	185	52,3	4461	189	92	13	6
2740	158	52,3	4461	189	92	13	6
2741	197	52,3	4461	189	92	13	6
2742	162	53,6	4576	204	94	15	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2743	177	53,6	4576	204	94	15	0
2744	179	54,0	4576	204	94	15	0
2745	182	54,3	4623	205	93	11	0
2746	169	54,3	4623	205	93	11	0
2747	170	55,0	4623	205	93	11	0
2748	173	52,8	4430	211	98	19	0
2749	170	50,8	4292	188	95	16	0
2750	168	50,8	4292	188	95	16	0
2751	165	50,8	4292	188	95	16	0
2752	163	50,8	4292	188	95	16	0
2753	160	50,7	4292	188	95	16	0
2754	132	50,1	4191	196	97	22	0
2755	154	50,1	4191	196	97	22	0
2756	178	49,8	4175	187	93	21	0
2757	179	49,6	4158	178	90	21	0
2758	205	49,6	4158	178	90	21	0
2759	222	49,6	4158	178	90	21	0
2760	249	49,7	4161	183	91	22	0
2761	265	49,8	4164	188	93	22	0
2762	239	50,7	4164	188	93	22	0
2763	272	57,9	4884	205	106	13	0
2764	250	57,6	4884	205	106	13	0
2765	241	57,9	4884	205	106	13	0
2766	215	58,1	4884	205	106	13	0
2767	236	57,8	4795	220	113	15	0
2768	229	57,8	4795	220	113	15	0
2769	255	57,9	4795	220	113	15	0
2770	210	57,9	4795	220	113	15	0
2771	255	60,4	4994	220	114	19	0
2772	181	60,8	4994	220	114	19	0
2773	200	61,1	4994	220	114	19	0
2774	125	34,7	2752	136	69	10	0
2775	135	33,8	2752	136	69	10	0
2776	225	33,5	2713	141	75	14	0
2777	250	33,2	2713	141	75	14	0
2778	262	33,2	2713	141	75	14	0
2779	207	33,2	2713	141	75	14	0
2780	193	35,1	2812	139	78	15	0
2781	216	35,1	2812	139	78	15	0
2782	201	35,1	2812	139	78	15	0
2783	200	38,5	3060	166	93	22	6
2784	166	38,5	3060	166	93	22	6
2785	180	38,5	3060	166	93	22	6
2786	185	45,3	3479	195	117	34	5
2787	207	45,3	3479	195	117	34	5
2788	177	45,3	3479	195	117	34	5
2789	182	47,4	3479	195	117	34	5
2790	163	53,6	4015	212	138	30	8
2791	154	53,6	4015	212	138	30	8
2792	149	58,4	4457	259	160	31	6
2793	142	58,4	4457	259	160	31	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2794	135	58,4	4457	259	160	31	6
2795	174	61,6	4784	274	165	39	5
2796	175	61,6	4784	274	165	39	5
2797	174	61,7	4784	274	165	39	5
2798	165	64,0	5024	263	166	32	14
2799	200	63,9	5024	263	166	32	14
2800	169	63,9	5024	263	166	32	14
2801	182	64,0	5078	268	161	30	7
2802	225	64,4	5132	272	157	27	6
2803	208	64,4	5132	272	157	27	6
2804	176	65,3	5270	250	152	26	7
2805	186	65,3	5270	250	152	26	7
2806	165	67,0	5270	250	152	26	7
2807	163	67,8	5397	252	148	27	0
2808	156	67,8	5397	252	148	27	0
2809	171	67,8	5397	252	148	27	0
2810	151	67,0	5546	261	144	26	0
2811	171	67,0	5546	261	144	26	0
2812	164	68,8	5732	250	136	28	0
2813	161	68,8	5732	250	136	28	0
2814	187	68,8	5732	250	136	28	0
2815	151	69,8	5832	261	134	30	0
2816	169	69,8	5832	261	134	30	0
2817	169	69,8	5832	261	134	30	0
2818	129	69,4	5860	234	128	34	0
2819	144	69,4	5860	234	128	34	0
2820	157	69,7	5801	243	119	25	0
2821	154	69,7	5801	243	119	25	0
2822	160	69,7	5801	243	119	25	0
2823	150	67,6	5797	217	110	28	0
2824	121	67,6	5797	217	110	28	0
2825	119	66,7	5724	228	112	23	0
2826	123	68,2	5724	228	112	23	0
2827	126	66,1	5589	217	102	17	0
2828	124	66,3	5589	217	102	17	6
2829	134	63,8	5486	205	101	19	7
2830	146	63,8	5486	205	101	19	7
2831	133	62,9	5428	203	100	17	7
2832	137	62,0	5370	202	98	15	5
2833	137	61,2	5312	200	97	13	6
2834	81	61,4	5312	200	97	13	6
2835	90	60,1	5166	207	97	16	5
2836	90	60,1	5166	207	97	16	5
2837	90	60,1	5166	207	97	16	5
2838	92	60,1	5166	207	97	16	5
2839	140	60,1	5166	207	97	16	5
2840	107	59,3	5105	193	97	21	5
2841	92	60,2	5105	193	97	21	6
2842	114	60,6	5108	201	104	22	6
2843	139	60,8	5108	201	104	22	6
2844	127	62,2	5276	206	108	24	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2845	141	62,2	5276	206	108	24	6
2846	136	65,8	5502	229	129	23	6
2847	104	65,8	5502	229	129	23	6
2848	124	69,2	5784	252	142	24	6
2849	98	70,0	5784	252	142	24	6
2850	140	74,0	6111	282	150	23	6
2851	148	74,1	6111	282	150	23	7
2852	132	80,8	6506	283	166	29	5
2853	161	80,8	6506	283	166	29	5
2854	117	86,0	6854	322	176	28	7
TEREBRATULA Mbr.							
2855	117	86,6	6854	322	176	28	7
2856	106	91,9	7254	328	197	37	13
2857	116	91,9	7254	328	197	37	13
2858	92	96,5	7542	353	211	45	14
2859	119	97,2	7542	353	211	45	15
2860	132	99,6	7819	371	231	50	15
2861	141	102,0	8096	388	251	56	15
2862	123	107,4	8096	388	251	56	16
2863	116	122,8	8998	472	303	81	18
2864	95	140,1	10258	584	384	90	21
2865	85	143,3	10258	584	384	90	21
2866	95	161,7	11693	651	476	96	23
2867	116	182,9	12882	775	568	116	26
2868	130	56,2	4795	220	113	15	0
2869	120	58,2	4994	220	114	19	0
2870	95	58,5	4994	220	114	19	0
2871	120	58,5	4994	220	114	19	0
2872	150	33,1	2752	136	69	10	0
2873	164	32,8	2713	141	75	14	0
2874	180	32,8	2713	141	75	14	0
2875	179	32,8	2713	141	75	14	0
2876	177	33,1	2713	141	75	14	0
2877	157	34,2	2812	139	78	15	0
2878	133	35,0	2812	139	78	15	0
2879	148	35,0	2812	139	78	15	0
2880	157	38,9	3060	166	93	22	6
2881	168	38,8	3060	166	93	22	6
2882	160	25,3	1840	115	81	20	8
2883	150	33,8	2468	170	110	20	8
2884	124	53,8	3852	268	186	26	8
2885	100	53,8	3852	268	186	26	8
2886	95	94,9	6454	450	339	66	9
2887	107	147,9	9861	731	548	116	9
2888	104	148,0	9861	731	548	116	12
2889	116	148,1	9861	731	548	116	14
2890	127	204,7	13277	1044	768	177	34
2891	137	204,7	13277	1044	768	177	34
2892	119	247,8	16154	1201	928	242	34
2893	114	247,2	16154	1201	928	242	21
2894	138	273,3	17659	1352	1036	242	25

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2895	120	272,6	17659	1352	1036	222	25
2896	126	278,7	18261	1352	1044	222	24
2897	142	274,4	18261	1279	1044	179	23
2898	115	276,9	18261	1316	1044	202	22
2899	150	280,5	18261	1353	1044	225	44
2900	160	276,3	17845	1353	1043	225	44
2901	169	276,3	17845	1353	1043	225	45
2902	186	259,5	17015	1191	954	180	45
2903	185	259,5	17015	1191	954	180	45
2904	203	259,5	17015	1191	954	180	45
2905	165	235,6	15852	1127	828	117	42
2906	136	235,5	15852	1127	828	117	40
2907	180	222,7	14658	1106	796	138	39
2908	128	222,7	14658	1106	796	138	39
2909	155	191,0	13677	967	737	158	36
2910	158	191,0	13677	967	737	158	36
2911	153	191,0	13677	967	737	158	36
2912	179	188,6	12662	902	664	136	25
2913	174	189,1	12662	902	664	149	26
2914	140	174,1	11905	804	583	149	24
2915	154	174,2	11905	804	583	149	26
2916	199	171,5	12108	764	551	119	13
2917	156	169,4	12312	723	519	90	12
2918	153	216,3	15145	1000	732	140	12
2919	156	216,5	15145	1000	732	140	15
2920	190	246,3	16897	1182	867	178	19
2921	200	276,9	18648	1364	1003	217	38
2922	220	276,9	18648	1364	1003	217	38
2923	235	276,9	18648	1364	1003	217	38
2924	218	294,0	19763	1443	1078	217	38
2925	200	311,0	20878	1522	1153	217	38
2926	189	299,5	19931	1522	1129	195	35
2927	150	299,7	19931	1522	1129	195	40
2928	139	257,3	16864	1274	983	174	40
2929	140	257,3	16864	1274	983	174	40
2930	150	228,5	15049	1131	866	148	34
2931	175	199,8	13235	987	749	122	28
2932	155	145,9	9724	731	527	65	24
2933	153	145,8	9724	731	527	65	23
2934	179	145,5	9724	731	527	65	15
2935	169	96,9	6965	535	385	53	15
2936	157	96,9	6965	535	385	53	15
2937	175	96,9	6965	535	385	53	15
2938	144	83,7	5972	457	337	51	15
2939	219	70,3	4979	378	288	48	14
2940	194	70,4	4979	378	288	48	14
2941	151	54,7	3852	302	232	37	8
2942	182	54,7	3852	302	232	37	8
2943	133	58,7	4102	322	248	42	12
2944	180	62,6	4352	341	265	48	15
2945	150	105,2	6785	518	415	87	19

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2946	123	105,2	6785	518	415	87	19
2947	131	157,8	10169	802	632	143	25
2948	145	157,8	10169	802	632	143	25
2949	135	203,6	13306	989	803	157	32
2950	129	203,6	13306	989	803	157	32
2951	106	232,5	15317	1162	889	157	32
2952	88	231,5	15317	1162	889	139	25
2953	118	254,4	16784	1275	992	178	26
2954	121	254,3	16784	1275	992	178	25
2955	144	268,6	17912	1299	992	178	35
2956	88	266,6	17912	1299	989	139	35
2957	112	109,0	6874	455	352	122	35
2958	95	86,1	5201	359	292	104	29
2959	120	63,2	3528	262	231	87	24
2960	155	60,4	3364	240	218	94	24
2961	180	60,4	3364	240	218	94	24
2962	165	60,4	3364	240	218	94	24
2963	180	58,2	3271	239	213	87	12
2964	120	56,4	3179	237	209	79	10
2965	110	57,6	3179	237	209	87	29
2966	120	53,1	3068	227	185	53	15
2967	133	53,1	3068	227	185	53	16
2968	181	53,8	3201	213	182	41	17
2969	200	53,8	3201	213	182	41	17
2970	210	53,8	3201	213	182	41	17
2971	198	57,8	3441	242	197	50	19
2972	189	57,8	3441	242	197	50	19
2973	199	57,8	3441	242	197	50	19
2974	185	63,6	3813	253	216	68	24
2975	173	63,6	3813	253	216	68	24
2976	219	63,6	3813	253	216	68	24
2977	211	69,6	4219	290	232	82	24
2978	228	69,4	4219	290	232	82	23
2979	214	69,2	4219	290	232	82	22
2980	209	74,2	4621	290	239	82	22
2981	186	73,4	4621	288	239	76	11
2982	221	72,7	4621	286	239	70	0
2983	223	74,9	4787	302	243	74	0
2984	119	77,2	4954	317	248	78	0
2985	193	77,1	4954	317	248	78	0
2986	178	80,7	5285	317	252	78	0
2987	178	80,6	5285	316	252	77	0
2988	179	80,4	5285	316	252	75	0
2989	200	80,4	5285	316	252	75	0
2990	225	83,0	5496	331	256	62	8
2991	227	85,6	5706	346	260	49	16
2992	189	85,6	5706	346	260	49	16
2993	200	85,6	5706	346	260	49	16
2994	197	95,9	6384	419	294	49	19
2995	190	102,7	6867	447	327	54	21
2996	182	109,6	7350	475	361	59	24

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
2997	207	109,6	7350	475	361	59	24
2998	223	109,6	7350	475	361	59	24
2999	231	109,6	7350	475	361	59	24
3000	220	109,6	7350	475	361	59	24
3001	210	116,6	7792	523	400	69	12
3002	216	124,1	8234	572	439	79	12
3003	241	131,0	8596	620	475	90	15
3004	220	138,4	8957	669	510	101	29
3005	245	149,4	9699	677	565	128	29
3006	215	152,9	9924	712	584	136	15
3007	196	157,0	10149	746	604	145	14
3008	160	157,0	10149	746	604	145	15
3009	218	157,0	10149	746	604	145	16
3010	256	158,1	10157	759	607	153	19
3011	226	159,7	10165	771	611	161	37
3012	269	159,5	10165	771	611	161	37
3013	225	159,2	10165	771	611	161	37
3014	176	159,3	10165	771	611	161	37
3015	260	159,4	10165	771	611	161	37
3016	250	156,5	10084	735	591	146	37
3017	245	153,5	10003	699	570	131	36
3018	217	153,6	10003	701	570	131	36
3019	220	153,6	10003	703	570	131	36
3020	210	147,5	9750	703	526	100	29
3021	198	149,3	9905	703	526	107	29
3022	208	151,1	10061	703	526	114	29
3023	173	148,8	10061	646	513	114	26
3024	170	158,2	10890	698	513	114	29
3025	139	151,3	10571	637	468	116	29
3026	125	144,4	10252	576	424	118	29
3027	160	133,4	9372	562	393	118	27
3028	125	128,9	9056	562	393	92	19
3029	184	136,0	9543	589	429	92	20
3030	176	143,1	10030	616	466	92	20
3031	241	143,1	10030	616	466	92	20
3032	235	143,1	10030	616	466	92	20
3033	250	159,1	10952	714	543	110	27
3034	129	175,0	11874	812	620	128	33
3035	160	192,0	12885	937	697	135	33
3036	185	209,1	13897	1062	775	142	33
3037	235	208,4	13897	1062	775	142	17
3038	245	207,6	13897	1062	775	142	0
3039	244	216,2	14432	1077	824	158	0
3040	209	224,9	14967	1091	874	174	0
3041	198	224,9	14967	1091	874	174	0
3042	200	224,9	14967	1091	874	174	0
3043	190	224,9	14967	1091	874	174	0
3044	165	218,0	14495	1087	845	151	0
3045	235	211,2	14022	1083	816	129	0
3046	170	195,6	12910	1011	763	125	0
3047	173	179,9	11798	939	711	121	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3048	173	180,6	11798	939	711	121	16
3049	223	181,3	11798	939	711	121	31
3050	177	323,7	21526	1548	1182	258	58
3051	150	138,8	9322	607	449	116	37
3052	82	138,8	9322	607	449	116	37
3053	80	125,2	8401	530	406	118	30
3054	139	125,2	8401	530	406	118	30
3055	159	96,2	6446	402	311	86	15
3056	159	68,0	4492	274	216	54	14
3057	78	68,0	4492	274	216	54	15
3058	135	68,4	4492	286	216	65	10
3059	113	67,5	4390	286	216	65	12
3060	136	70,0	4552	305	226	68	26
3061	94	73,5	4761	313	238	76	26
3062	119	77,0	4970	321	250	85	26
3063	100	77,0	4970	321	250	85	26
3064	75	77,0	4970	321	250	85	26
3065	119	84,5	5416	362	270	106	26
3066	122	84,5	5416	362	270	106	26
3067	126	87,5	5638	363	281	106	28
3068	116	90,6	5860	364	293	106	30
3069	108	90,1	5860	364	293	93	30
3070	99	93,8	6115	393	306	84	30
3071	86	93,8	6115	393	306	84	30
3072	107	98,3	6300	421	320	101	29
3073	139	99,9	6429	421	320	101	29
3074	96	99,3	6492	409	316	81	21
3075	52	98,1	6492	409	304	63	21
3076	78	101,5	6626	441	319	78	27
3077	61	101,4	6626	441	319	78	27
3078	144	105,6	6888	441	330	88	35
3079	158	105,3	6888	421	330	88	35
3080	177	105,3	6888	421	330	88	35
3081	150	109,0	7110	451	339	98	36
3082	133	113,8	7429	451	353	117	37
3083	80	113,8	7429	447	353	117	37
3084	140	120,8	7845	491	375	135	42
3085	101	120,8	7845	491	375	135	42
3086	119	130,3	8487	553	404	146	45
3087	124	130,3	8487	553	404	146	45
3088	123	145,8	9626	620	451	153	45
3089	108	145,5	9626	620	451	153	39
3090	129	145,5	9626	620	451	153	39
3091	115	168,8	11408	748	536	128	38
3092	165	168,8	11408	748	536	128	38
3093	144	207,1	13942	982	677	170	46
3094	165	207,1	13942	982	677	170	46
3095	133	245,2	16788	1102	802	170	47
3096	128	244,7	16788	1102	802	157	47
3097	143	244,7	16788	1102	802	157	47
3098	170	270,4	18669	1304	868	137	49

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3099	136	270,4	18669	1304	868	137	50
3100	135	286,5	19464	1414	937	160	51
3101	113	287,2	19464	1414	944	172	52
3102	120	287,6	19464	1414	951	183	47
3103	100	285,8	19416	1333	951	203	45
3104	84	276,5	18645	1333	931	212	44
3105	67	270,7	18223	1319	911	212	36
3106	67	265,2	17801	1306	891	212	38
3107	62	256,5	17382	1232	855	190	25
3108	50	248,4	16964	1159	819	168	24
3109	60	248,6	16964	1159	819	177	23
3110	75	248,0	16964	1159	819	186	0
3111	129	236,1	15999	1136	776	186	0
3112	151	218,2	15151	977	696	144	0
3113	138	218,2	15151	977	696	144	0
3114	121	218,2	15151	977	696	144	0
3115	138	201,0	14106	940	603	99	0
3116	156	201,0	14106	940	603	99	0
3117	116	201,0	14106	940	603	99	0
3118	159	187,5	13183	885	562	98	0
3119	134	180,0	12758	824	526	86	0
CHACRA Fm.							
3120	140	172,5	12333	763	489	74	0
3121	104	172,5	12333	763	489	74	0
3122	156	169,0	11989	734	482	87	18
3123	58	165,4	11644	706	475	100	36
3124	138	165,4	11644	706	475	100	37
3125	129	161,1	11341	686	458	100	37
3126	147	156,8	11037	666	441	100	37
3127	150	151,7	10722	661	427	100	19
3128	139	147,2	10408	655	414	100	18
3129	154	148,4	10408	655	414	107	38
3130	159	138,4	9768	578	379	107	38
3131	168	138,4	9768	578	379	107	38
3132	110	138,4	9768	578	379	107	38
3133	102	132,4	9387	556	359	94	32
3134	86	126,4	9005	533	338	80	27
3135	180	120,7	8718	492	317	68	14
3136	159	115,5	8431	451	295	57	13
3137	147	115,6	8431	453	295	61	12
3138	147	115,8	8431	454	295	66	12
3139	141	110,6	8014	454	283	66	14
3140	91	110,5	8014	454	283	66	11
3141	75	111,0	8014	454	283	66	22
3142	100	106,3	7749	452	256	51	22
3143	134	106,4	7749	452	256	53	22
3144	104	106,4	7749	452	256	55	22
3145	95	104,5	7729	401	248	55	17
3146	80	105,4	7729	419	248	61	25
3147	95	105,9	7719	419	248	69	30
3148	76	105,3	7719	396	248	69	30

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3149	99	107,9	7883	410	248	74	30
3150	57	107,3	7883	410	241	74	28
3151	110	114,7	8453	434	259	84	30
3152	96	114,1	8453	429	259	72	30
3153	118	81,3	5830	341	207	53	21
3154	105	61,6	4271	250	156	41	21
3155	94	41,9	2712	159	106	29	21
3156	120	42,1	2661	173	106	42	21
3157	156	40,8	2650	173	104	42	15
3158	186	40,8	2650	173	104	42	16
3159	172	40,5	2633	165	101	41	14
3160	118	40,9	2616	157	98	40	28
3161	188	40,9	2616	157	98	40	28
3162	181	39,7	2543	155	100	38	25
3163	171	39,7	2543	155	100	38	25
3164	205	39,8	2543	155	100	38	25
3165	190	39,9	2543	155	100	38	25
3166	213	37,4	2457	141	96	32	10
3167	197	37,4	2457	141	96	32	10
3168	219	36,1	2416	138	92	26	5
3169	187	35,1	2375	136	88	21	7
3170	148	35,2	2375	136	88	21	8
3171	128	35,3	2349	135	88	28	10
3172	155	35,3	2349	135	88	28	10
3173	174	33,7	2354	130	84	24	11
3174	162	32,1	2359	125	80	21	12
3175	198	32,1	2359	125	80	21	12
3176	170	34,5	2407	134	80	21	16
3177	195	34,0	2407	134	78	14	16
3178	174	34,0	2407	134	78	14	16
3179	173	35,7	2553	140	78	18	16
3180	162	33,2	2553	140	77	18	11
3181	177	37,5	2773	147	81	20	14
3182	190	41,8	2992	154	86	22	18
3183	169	41,8	2992	154	86	22	18
3184	201	41,8	2992	154	86	22	18
3185	174	46,7	3384	179	96	27	16
3186	220	51,7	3776	203	107	32	15
3187	167	51,7	3776	203	107	32	15
3188	173	65,9	4922	245	142	37	10
3189	111	65,9	4922	245	142	37	10
3190	220	80,9	6168	300	174	37	10
3191	136	80,9	6168	300	174	37	10
3192	155	80,9	6168	300	174	37	10
3193	102	88,7	6811	342	192	44	13
3194	160	96,6	7454	384	211	51	17
3195	184	96,6	7454	384	211	51	17
3196	127	113,9	8838	421	243	45	12
3197	134	130,0	10063	527	278	45	15
3198	120	130,9	10063	527	278	43	15
3199	100	142,6	11073	529	323	54	16

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3200	107	142,6	11073	529	323	54	16
3201	130	142,6	11073	529	323	54	16
3202	159	145,4	11284	556	326	50	20
3203	160	148,1	11495	582	328	47	23
3204	181	161,4	12386	611	383	67	22
3205	162	161,4	12386	611	383	67	22
3206	155	161,8	12386	611	383	67	22
3207	174	169,7	13010	662	403	75	20
3208	228	169,7	13010	662	403	75	19
3209	200	169,8	13010	662	403	75	20
3210	153	169,9	13010	662	403	75	20
3211	144	177,1	13562	723	421	88	21
3212	99	184,4	14179	715	431	104	29
3213	142	185,2	14179	715	431	104	29
3214	129	184,7	14469	678	411	67	20
3215	138	184,7	14469	678	411	67	20
3216	136	157,3	12245	599	347	69	26
3217	162	147,0	11502	540	336	74	16
3218	146	132,9	10270	508	296	70	20
3219	160	132,9	10270	508	296	70	20
3220	160	132,9	10270	508	296	70	20
3221	134	127,0	9787	496	282	72	19
3222	132	121,1	9303	484	267	73	18
3223	137	121,1	9303	484	267	73	18
3224	145	117,0	9064	426	266	57	21
3225	139	117,0	9064	426	266	57	21
3226	156	117,3	9064	426	266	57	21
3227	174	117,6	9064	426	266	57	21
3228	153	120,5	9259	459	265	68	17
3229	145	125,1	9716	490	272	54	15
3230	131	125,1	9716	490	272	54	15
3231	134	128,7	10051	476	279	49	16
3232	110	128,7	10051	476	279	49	16
3233	150	122,0	9482	478	267	52	19
3234	107	104,6	8238	383	225	40	16
3235	84	104,6	8238	383	225	40	16
3236	107	93,9	7362	347	203	38	13
3237	152	83,2	6486	312	181	35	10
3238	149	63,6	4981	243	141	27	8
3239	184	61,8	4981	243	141	27	8
3240	163	64,2	4981	243	141	27	8
3241	148	55,8	4257	201	124	28	15
3242	157	56,0	4257	201	124	28	15
3243	139	56,2	4257	201	124	28	15
3244	174	59,0	4485	224	127	35	10
3245	117	59,1	4485	224	127	35	10
3246	94	74,3	5280	269	147	44	19
3247	85	79,5	5280	269	147	44	19
3248	55	81,8	5771	313	190	52	11
3249	120	77,3	5771	313	190	52	11
3250	150	70,2	5160	295	169	39	22

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3251	120	70,1	5160	295	169	39	22
3252	180	63,2	4675	254	148	33	14
3253	163	63,2	4675	254	148	33	14
3254	157	63,2	4675	254	148	33	14
3255	171	59,6	4388	242	146	35	9
3256	170	59,3	4388	242	146	35	9
3257	227	59,3	4388	242	146	35	9
3258	154	57,2	4222	228	136	27	15
3259	155	57,3	4222	228	136	27	15
3260	99	56,2	4186	223	135	29	12
3261	104	56,3	4186	223	135	29	13
3262	122	55,5	4118	220	133	32	14
3263	152	55,4	4118	220	133	32	12
3264	144	56,0	4118	220	133	32	12
3265	118	56,3	4102	210	139	38	19
3266	128	56,3	4102	210	139	38	19
3267	119	54,8	3991	220	131	36	20
3268	127	54,8	3991	220	131	36	20
3269	141	49,2	3828	217	115	37	7
3270	132	51,8	3828	217	115	37	7
3271	138	50,1	3682	194	114	32	17
3272	143	50,2	3682	194	114	32	17
3273	128	50,2	3682	194	114	32	17
3274	129	48,4	3490	187	119	38	20
3275	125	42,9	3342	172	105	27	9
3276	66	44,4	3342	172	105	27	9
3277	128	41,7	3150	165	99	21	7
3278	119	42,4	3150	165	99	21	7
3279	110	39,8	2908	162	90	21	8
3280	128	39,8	2908	162	90	21	8
3281	111	35,2	2586	146	78	29	9
3282	100	34,1	2508	133	83	25	8
3283	94	34,1	2508	133	83	25	8
3284	92	34,4	2460	140	81	30	12
3285	96	34,4	2460	140	81	30	12
3286	97	34,2	2477	134	80	25	18
3287	98	35,1	2512	138	78	23	14
3288	109	35,8	2581	140	84	22	11
3289	80	35,8	2581	140	84	22	11
3290	56	35,5	2658	142	80	22	8
3291	75	37,2	2806	153	88	23	11
3292	117	37,5	2806	153	88	23	11
3293	202	37,9	2806	153	88	23	11
3294	187	40,7	3015	150	91	29	20
3295	49	40,9	3015	150	91	29	20
3296	44	41,0	3015	150	91	29	20
3297	95	46,3	3454	174	98	29	18
3298	197	51,6	3894	197	106	29	16
3299	205	51,4	3894	197	106	27	13
3300	245	51,2	3894	197	106	26	10
3301	191	49,8	3806	189	101	21	10

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3302	149	48,4	3718	180	96	17	10
3303	217	48,4	3718	180	96	17	10
3304	225	48,5	3718	180	96	17	10
3305	163	43,7	3411	168	85	17	4
3306	185	43,8	3411	168	85	17	4
3307	197	44,0	3411	168	85	17	8
3308	211	42,3	3274	166	81	16	8
3309	232	40,6	3136	164	77	15	8
3310	233	40,6	3136	164	77	15	8
3311	203	40,7	3136	164	77	16	10
3312	211	40,9	3136	164	77	17	12
3313	212	39,5	3043	156	76	18	12
3314	229	38,2	2949	148	76	20	12
3315	160	35,7	2744	139	75	18	12
3316	223	33,2	2539	130	74	16	13
3317	181	33,2	2539	130	74	16	13
3318	232	33,2	2539	130	74	16	13
3319	233	33,5	2538	131	75	14	12
3320	215	33,9	2542	129	76	15	11
3321	225	34,0	2570	137	72	15	6
3322	250	32,1	2512	128	69	14	4
3323	229	30,3	2455	120	66	13	5
3324	250	32,4	2560	129	70	13	6
3325	199	34,4	2665	137	74	13	8
3326	262	34,4	2665	137	74	13	8
3327	271	34,4	2665	137	74	13	8
3328	215	38,1	2950	146	84	17	8
3329	260	41,8	3235	156	94	21	8
3330	205	41,6	3235	156	94	21	4
3331	219	41,4	3235	156	94	21	0
3332	165	46,4	3619	181	100	26	5
3333	224	51,5	4004	206	105	31	11
3334	250	57,2	4453	227	116	31	12
3335	255	63,0	4902	247	128	32	12
3336	116	61,3	4782	240	126	27	10
3337	204	59,6	4662	233	124	22	9
3338	180	59,7	4659	230	127	26	10
3339	198	59,8	4656	227	131	29	12
3340	88	61,4	4763	236	135	29	12
3341	195	63,0	4870	245	139	29	12
3342	45	64,5	4977	254	143	29	12
3343	55	64,4	4977	254	143	27	11
3344	55	64,3	4977	254	143	26	9
3345	65	43,1	3159	171	94	28	14
3346	75	39,9	2917	159	91	20	10
3347	96	39,9	2917	159	91	20	10
3348	96	39,9	2917	159	91	20	10
3349	96	39,9	2917	159	91	20	10
3350	128	40,1	2932	159	92	21	10
3351	139	40,4	2948	159	93	23	10
3352	75	40,6	2964	159	94	24	10

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3353	124	37,8	2964	157	94	24	6
3354	143	39,9	2946	160	90	28	12
3355	145	39,9	2946	160	90	28	12
3356	122	38,4	2938	167	90	22	14
3357	129	38,4	2938	167	90	22	14
3358	108	40,5	3003	167	90	22	14
3359	128	39,8	3003	151	90	19	10
3360	141	39,8	3003	151	90	19	10
3361	152	41,9	3130	168	95	23	10
3362	139	41,9	3130	168	95	23	10
3363	173	41,9	3130	168	95	23	10
3364	149	43,5	3299	180	93	16	8
3365	161	43,5	3299	180	93	16	8
3366	147	44,6	3411	180	93	16	8
3367	174	42,0	3411	167	91	14	0
3368	100	44,5	3479	179	94	17	4
3369	191	46,9	3548	192	96	20	7
3370	175	46,9	3548	192	96	20	7
3371	165	46,9	3548	192	96	20	7
3372	153	49,3	3738	195	105	21	7
3373	158	49,1	3738	195	105	21	7
3374	132	51,0	3879	206	108	23	11
3375	133	50,3	3879	206	108	23	11
3376	138	50,3	3879	206	108	23	11
3377	135	52,7	4034	206	112	27	16
3378	129	52,6	4034	203	112	27	16
3379	126	54,4	4192	214	112	27	16
3380	161	54,0	4192	214	107	24	12
3381	163	54,0	4192	214	107	24	12
3382	163	57,2	4463	214	114	24	14
3383	165	57,1	4463	206	114	23	14
3384	166	57,1	4463	206	114	23	14
3385	160	59,7	4695	225	112	25	11
3386	165	59,7	4695	225	112	25	11
3387	199	59,7	4695	225	112	25	11
3388	159	61,4	4863	238	114	19	10
3389	129	61,4	4863	238	114	19	10
3390	141	65,4	5168	238	123	20	14
3391	105	65,4	5168	238	123	20	14
3392	94	68,8	5404	260	130	25	14
3393	130	68,6	5404	260	130	25	11
3394	124	72,4	5666	290	139	30	11
3395	134	72,3	5666	290	139	30	11
3396	145	72,3	5666	290	139	30	11
3397	133	74,5	5883	280	147	33	17
3398	144	74,5	5883	280	147	33	17
3399	133	75,3	5912	291	150	38	10
3400	127	75,3	5912	291	150	38	10
3401	139	76,1	5912	305	150	46	16
3402	158	74,8	5824	305	150	46	16
3403	122	74,8	5824	305	150	46	16

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3404	124	70,1	5673	283	147	32	12
3405	121	71,9	5673	283	147	32	12
3406	125	69,0	5446	276	136	27	12
3407	132	69,4	5446	276	136	28	12
3408	116	66,8	5211	270	134	28	14
3409	95	60,7	4988	241	127	25	14
3410	129	62,8	4988	242	127	25	14
3411	126	58,8	4707	242	113	16	6
3412	124	59,0	4707	242	113	17	10
3413	124	53,9	4427	210	107	17	10
3414	118	53,9	4427	210	107	17	10
3415	125	51,6	4194	210	106	20	8
3416	118	51,6	4194	210	106	20	8
3417	122	52,4	4116	213	103	20	7
3418	122	52,4	4116	213	103	20	7
3419	108	52,9	4117	192	102	24	14
3420	104	53,4	4132	205	105	24	14
3421	123	50,5	4132	205	105	23	7
3422	95	51,3	4132	211	105	28	16
3423	136	50,5	4084	211	99	28	16
3424	135	50,5	4084	211	99	28	16
3425	123	52,6	4153	204	102	26	8
3426	122	54,1	4258	214	102	26	15
3427	118	53,6	4258	214	101	20	15
3428	108	53,6	4258	214	101	20	15
3429	114	55,7	4431	210	104	23	9
3430	113	55,8	4437	211	104	23	9
3431	122	55,9	4442	211	105	23	9
3432	129	54,9	4442	211	105	22	8
3433	135	56,1	4451	227	101	16	8
3434	123	56,2	4451	227	101	16	9
3435	126	56,9	4564	216	105	20	9
3436	124	60,0	4773	236	114	21	9
3437	157	61,8	4951	256	121	19	8
3438	87	29,1	2177	117	64	12	9
3439	100	28,7	2280	130	62	12	9
3440	170	28,7	2280	130	62	12	9
3441	176	29,5	2280	130	62	12	10
3442	184	30,2	2280	130	62	12	8
3443	179	31,4	2372	126	67	17	9
3444	154	31,4	2372	126	67	17	9
3445	185	32,5	2402	129	68	20	6
3446	199	32,5	2402	129	68	20	6
3447	179	32,5	2402	129	68	20	6
3448	160	31,8	2432	140	68	18	12
3449	128	31,8	2432	140	68	18	12
3450	138	31,8	2432	140	68	18	12
3451	129	30,6	2451	127	73	19	8
3452	113	30,7	2451	127	73	19	8
3453	95	31,8	2524	142	66	20	14
3454	102	32,4	2602	127	72	18	7

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3455	124	32,4	2602	127	72	18	7
3456	134	33,4	2659	124	64	13	5
3457	145	33,4	2659	124	64	13	5
3458	146	34,4	2738	146	60	19	5
3459	157	34,4	2738	146	60	19	5
3460	154	34,4	2738	146	60	19	5
3461	175	34,9	2773	142	63	15	6
3462	168	35,2	2808	137	65	11	6
3463	117	35,2	2808	137	65	11	6
3464	152	35,4	2887	139	69	10	7
3465	139	36,9	2887	139	69	10	7
3466	141	37,6	2893	158	65	12	13
3467	189	37,6	2893	158	65	12	13
3468	158	36,9	2954	150	69	12	7
3469	174	36,5	3014	143	73	12	8
3470	171	36,5	3014	143	73	12	8
3471	175	38,7	3078	157	71	18	8
3472	128	38,7	3078	157	71	18	8
3473	102	38,7	3078	157	71	18	8
3474	94	39,0	3234	168	73	12	7
3475	110	42,3	3497	161	80	14	8
3476	116	42,3	3497	161	80	14	8
3477	127	42,5	3497	161	80	14	8
3478	119	45,9	3786	178	85	16	8
3479	162	47,2	3786	178	85	16	8
3480	116	50,2	4089	192	82	10	8
3481	109	50,2	4089	192	82	10	8
3482	126	53,4	4355	203	87	11	7
3483	69	53,6	4355	203	87	11	7
3484	130	56,3	4588	214	94	14	6
3485	118	57,3	4752	215	100	15	13
3486	142	57,2	4753	214	99	16	12
3487	170	59,3	4752	225	103	19	13
3488	125	58,4	4679	225	103	19	12
3489	68	53,4	4422	218	97	20	11
3490	81	53,4	4422	218	97	20	12
3491	106	53,3	4422	218	97	20	10
3492	119	50,6	4227	200	96	18	6
3493	155	51,0	4227	200	96	18	6
3494	133	50,9	4144	180	89	17	7
3495	149	51,1	4131	187	95	17	10
3496	128	49,5	4105	205	93	15	13
3497	140	49,5	4105	205	93	15	13
3498	140	49,5	4105	205	93	15	13
3499	134	49,5	4105	205	93	15	13
3500	131	48,1	4063	184	88	12	8
3501	141	49,3	4063	184	88	12	7
3502	108	49,8	4107	197	86	12	6
3503	132	49,8	4107	197	86	12	6
3504	115	50,0	4107	197	86	12	6
3505	123	51,2	4175	214	97	14	5

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3506	122	52,0	4175	214	97	14	7
3507	125	46,7	3832	189	87	20	10
3508	140	46,8	3832	189	87	20	10
3509	119	41,5	3434	159	78	16	6
3510	117	41,5	3434	159	78	16	6
3511	127	35,5	2996	146	63	5	4
3512	141	37,0	2996	146	63	5	4
3513	144	34,5	2767	125	58	12	5
3514	154	34,5	2767	125	58	12	5
3515	124	33,5	2760	134	57	9	6
3516	126	33,5	2760	134	57	9	6
3517	114	34,6	2879	139	66	15	7
3518	130	34,7	2879	139	66	15	7
3519	109	34,7	2879	139	66	15	7
3520	127	36,8	3076	141	67	13	8
3521	132	35,6	2987	139	57	17	13
3522	134	35,9	2987	139	57	17	13
3523	157	36,2	2987	139	57	17	13
3524	167	36,5	2987	139	57	17	13
3525	132	32,4	2625	127	58	15	6
3526	113	26,3	2126	96	46	14	6
3527	118	26,2	2126	96	46	14	5
3528	110	20,2	1653	84	41	14	6
3529	152	87,2	7024	339	163	30	9
3530	75	102,1	8324	423	210	50	3
3531	122	99,3	8192	406	207	52	6
3532	169	100,3	8192	406	207	52	6
3533	65	101,2	8192	406	207	52	6
3534	166	97,2	7840	404	199	38	12
3535	152	90,5	7505	366	186	32	7
3536	138	90,5	7505	366	186	32	7
3537	159	90,9	7505	366	186	32	7
3538	146	89,1	7330	366	183	33	7
3539	136	89,0	7330	366	183	33	7
3540	169	86,8	7231	379	174	29	6
3541	162	86,8	7231	379	174	29	6
3542	164	86,8	7231	379	174	29	6
3543	149	86,8	7231	379	174	29	6
3544	176	85,5	7228	338	161	24	6
3545	174	85,5	7228	338	161	24	7
3546	180	89,2	7369	346	167	24	7
3547	150	89,4	7369	346	167	24	7
3548	166	89,6	7369	346	167	24	7
3549	148	91,2	7472	370	167	28	8
3550	136	91,3	7559	358	166	26	7
3551	137	91,5	7647	348	166	24	7
3552	122	92,0	7647	348	166	24	7
3553	118	93,9	7769	374	164	32	6
3554	135	93,9	7769	374	164	32	6
3555	132	94,3	7931	393	169	38	8
3556	163	94,3	7931	393	169	38	8

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3557	125	96,8	8134	380	174	38	6
3558	133	96,8	8134	380	174	38	6
3559	143	98,1	8286	407	176	35	6
3560	134	98,1	8286	407	176	35	6
3561	134	98,1	8286	407	176	35	6
3562	92	98,3	8286	407	176	35	6
3563	111	98,5	8286	407	176	35	6
3564	123	101,6	8615	398	178	33	5
3565	108	101,6	8615	398	178	33	5
3566	111	106,3	9061	431	190	27	5
3567	149	106,6	9061	431	190	27	5
3568	136	114,0	9649	479	202	33	6
3569	124	116,6	9649	479	202	33	6
3570	128	123,9	10374	476	212	30	7
3571	123	123,9	10374	476	212	30	7
3572	124	130,7	10913	513	228	33	10
3573	183	130,7	10913	513	228	33	10
3574	156	130,8	10913	513	228	33	10
3575	128	133,9	11289	568	245	44	8
3576	135	136,6	11289	568	245	44	8
3577	131	138,7	11483	551	249	52	9
3578	148	138,8	11483	551	249	52	9
3579	146	134,4	11244	557	252	55	16
3580	139	134,4	11244	557	252	55	16
3581	117	134,8	11244	557	252	55	16
3582	116	129,6	10893	506	249	43	14
3583	119	131,9	10893	506	249	43	14
3584	111	127,7	10532	510	232	37	13
3585	111	127,8	10532	510	232	37	13
3586	116	125,2	10259	521	227	42	10
3587	139	125,2	10259	521	227	42	11
3588	128	118,1	9938	458	217	32	13
3589	129	118,1	9938	458	217	32	13
3590	93	110,6	9254	453	206	35	6
3591	79	110,4	9254	453	206	35	6
3592	79	110,2	9254	453	206	35	6
3593	79	110,1	9254	453	206	35	6
3594	65	98,7	8416	382	182	24	5
3595	88	87,5	7384	354	160	28	5
3596	136	85,7	7210	353	160	28	5
3597	73	84,0	7036	352	160	27	6
3598	175	82,9	6959	336	158	28	5
3599	142	82,0	6882	321	157	28	10
3600	115	82,0	6882	321	157	28	10
3601	114	81,8	6895	322	157	30	4
3602	118	81,9	6895	322	157	30	5
3603	115	82,0	6857	340	152	36	6
3604	116	82,0	6857	340	152	36	6
3605	112	81,1	6781	309	142	27	0
3606	122	80,1	6790	318	146	23	0
3607	112	75,0	6343	305	135	26	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3608	118	75,0	6343	305	135	26	0
3609	131	66,7	5710	261	119	26	0
3610	112	68,1	5710	261	119	26	0
3611	123	61,9	5148	246	114	22	0
3612	107	62,3	5148	246	114	22	0
3613	152	59,7	5019	226	114	29	0
3614	151	59,9	5019	226	114	29	0
3615	152	60,1	5019	226	114	29	0
3616	154	63,2	5298	246	116	30	0
3617	142	67,8	5714	281	123	26	0
3618	156	69,8	5868	281	127	26	0
3619	142	71,8	6021	281	131	26	0
3620	150	67,8	5771	270	121	20	0
3621	136	67,8	5771	270	121	20	0
3622	117	60,1	5050	228	105	21	0
3623	131	60,1	5050	228	105	21	0
3624	126	86,7	7186	351	163	30	0
3625	111	38,8	3253	159	76	13	0
3626	75	38,8	3253	160	76	13	0
3627	134	37,6	3161	160	74	11	0
3628	141	37,6	3161	160	74	11	0
3629	106	38,0	3161	160	74	20	0
3630	122	37,1	3078	158	76	20	0
3631	75	36,4	3026	151	76	16	0
3632	162	35,4	2977	145	69	9	0
3633	133	35,4	2977	145	69	9	0
3634	129	35,1	2960	148	66	12	0
3635	130	35,1	2960	148	66	12	0
3636	129	35,0	2995	141	63	13	0
3637	141	35,0	2995	141	63	13	0
3638	143	36,4	3034	141	65	13	0
3639	158	36,3	3034	141	65	11	0
3640	141	36,3	3034	141	65	9	0
3641	129	36,8	3109	149	65	13	0
3642	126	36,8	3109	149	65	13	0
3643	151	36,8	3109	149	65	13	0
3644	150	38,3	3213	149	66	13	0
3645	144	38,2	3213	146	66	12	0
3646	123	38,2	3213	146	66	12	0
3647	158	39,1	3303	152	68	15	0
3648	158	39,1	3303	152	68	15	0
3649	168	41,6	3490	159	79	16	0
3650	159	41,5	3490	159	79	16	0
3651	144	43,2	3588	164	79	20	0
3652	150	43,1	3588	164	79	20	0
3653	139	43,1	3588	164	79	20	0
3654	139	43,1	3588	164	79	20	0
3655	106	42,2	3596	169	74	18	0
3656	137	42,2	3596	169	74	18	0
3657	123	42,6	3596	169	74	18	0
3658	154	41,8	3544	159	74	16	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3659	143	41,8	3544	159	74	16	0
3660	174	40,1	3398	160	74	12	0
3661	132	40,1	3398	160	74	12	0
3662	158	40,2	3398	161	74	12	0
3663	133	39,0	3294	161	71	10	0
3664	158	39,0	3294	161	71	10	0
3665	166	39,3	3312	161	71	13	0
3666	171	39,0	3312	151	69	13	0
3667	145	39,0	3312	151	69	13	0
3668	177	39,8	3379	156	69	13	0
3669	156	39,4	3379	156	69	11	0
3670	174	39,4	3379	156	69	11	0
3671	183	41,1	3450	163	73	14	0
3672	115	41,1	3450	163	73	14	0
3673	155	41,0	3495	158	72	14	0
3674	145	41,2	3495	158	72	14	0
3675	138	41,3	3495	158	72	14	0
3676	143	41,7	3500	168	76	16	0
3677	164	41,7	3500	168	76	16	0
3678	125	42,4	3500	168	76	16	0
3679	166	42,2	3508	168	73	15	0
3680	161	42,2	3508	168	73	15	0
3681	166	42,0	3543	165	77	15	0
3682	143	42,0	3543	165	77	15	0
3683	178	42,0	3543	165	77	15	0
3684	155	42,0	3543	165	77	15	0
3685	158	40,8	3513	170	73	6	0
3686	152	40,8	3513	170	73	6	0
3687	118	39,0	3390	155	71	5	0
3688	146	39,9	3390	155	71	5	0
3689	133	37,9	3199	150	67	7	0
3690	121	37,9	3199	150	67	7	0
3691	151	38,1	3199	152	67	8	0
3692	131	36,3	3036	152	63	8	0
3693	146	36,3	3036	152	63	8	0
3694	122	34,8	2984	142	63	5	0
3695	145	34,8	2984	142	63	5	0
3696	118	34,2	2912	141	62	10	0
3697	140	34,2	2912	141	62	10	0
3698	156	34,7	2912	142	62	10	0
3699	141	33,6	2815	142	62	8	0
3700	137	33,6	2815	142	62	8	0
3701	136	32,6	2747	133	62	11	0
3702	143	32,6	2747	133	62	11	0
3703	114	33,0	2747	140	65	12	0
3704	136	32,7	2743	140	65	12	0
3705	147	34,6	2897	140	65	13	0
3706	136	34,4	2897	138	65	13	0
3707	131	34,4	2897	138	65	13	0
3708	134	37,0	3092	151	71	10	0
3709	155	37,0	3092	151	71	10	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3710	123	37,8	3149	159	71	11	0
3711	191	37,5	3149	159	71	11	0
3712	111	37,6	3149	159	71	14	0
3713	137	35,2	2930	141	68	14	0
3714	91	29,9	2477	126	56	9	0
3715	100	30,0	2477	126	56	11	0
3716	166	17,1	1401	64	31	5	0
3717	166	17,0	1401	64	31	5	0
3718	175	11,5	999	51	23	0	0
3719	171	11,5	999	51	23	0	0
3720	178	12,9	1116	56	26	0	0
3721	175	12,9	1116	56	26	0	0
3722	136	13,1	1116	56	26	0	0
3723	162	13,9	1194	59	25	0	0
3724	166	14,0	1230	56	26	0	0
3725	172	14,3	1230	56	26	0	0
3726	155	14,5	1230	56	26	0	0
3727	121	15,1	1257	71	27	0	0
3728	135	15,1	1257	71	27	0	0
3729	155	14,8	1285	59	28	5	0
3730	144	14,9	1285	59	28	6	0
3731	128	16,0	1341	67	31	6	0
3732	123	16,0	1341	67	31	6	0
3733	124	16,2	1364	69	29	6	0
3734	110	16,4	1364	69	29	7	0
3735	109	17,2	1425	75	32	7	0
3736	138	17,2	1425	75	32	7	0
3737	148	17,2	1425	75	32	7	0
3738	156	18,0	1525	78	34	7	0
3739	165	18,1	1525	78	34	8	0
3740	170	18,0	1544	77	30	9	0
3741	215	17,9	1544	77	30	8	0
3742	180	17,9	1544	77	30	7	0
3743	203	17,1	1461	68	30	7	0
3744	187	17,1	1461	68	30	7	0
3745	186	17,1	1461	68	30	7	0
3746	189	17,2	1461	68	30	7	0
3747	171	17,2	1461	68	30	7	0
3748	165	18,9	1592	81	34	8	0
3749	159	22,1	1882	95	38	9	0
3750	150	22,2	1882	95	38	10	0
3751	145	22,2	1882	95	38	10	0
3752	146	26,8	2287	112	48	11	0
3753	137	26,8	2287	112	48	11	0
3754	136	27,2	2287	112	48	11	0
3755	175	31,9	2712	125	57	11	0
3756	188	31,9	2712	125	57	11	0
3757	175	31,9	2712	125	57	11	0
3758	170	34,4	2962	142	63	11	0
3759	144	34,5	2962	142	63	14	0
3760	120	37,3	3124	150	64	15	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3761	110	37,3	3124	150	64	15	0
3762	98	37,3	3124	150	64	15	0
3763	92	39,7	3360	154	70	15	0
3764	100	40,3	3397	166	79	14	0
3765	95	40,7	3397	166	79	14	0
3766	100	41,8	3530	159	76	13	0
3767	76	45,9	3904	185	79	14	0
3768	68	46,1	3904	185	79	14	0
3769	77	51,4	4317	209	94	14	0
3770	89	56,9	4761	226	104	23	0
3771	67	59,1	5013	244	106	25	0
3772	60	62,4	5260	235	110	26	0
3773	56	64,2	5403	258	118	26	0
3774	82	64,2	5403	258	118	26	0
3775	94	68,2	5706	254	132	28	0
3776	88	72,9	6123	286	139	28	0
3777	82	73,0	6123	286	139	29	0
3778	98	80,0	6680	320	154	30	0
3779	84	80,4	6680	320	154	28	0
3780	75	84,9	7089	325	165	28	0
3781	67	86,0	7089	325	165	29	0
3782	78	87,1	7156	339	169	29	0
3783	37	87,3	7156	339	169	31	0
3784	94	88,7	7183	361	177	32	0
3785	77	88,2	7156	346	187	30	0
3786	110	88,3	7156	346	187	31	0
3787	111	84,8	7010	354	188	32	0
3788	88	84,9	6878	374	203	32	0
3789	100	86,9	6878	374	204	35	0
3790	112	86,4	6842	363	204	38	0
3791	28	85,8	6805	351	204	39	0
3792	90	82,4	6611	366	209	38	0
3793	81	82,7	6611	366	209	39	0
3794	132	76,2	6162	320	186	38	0
3795	82	76,2	6162	320	186	38	0
3796	162	70,7	5667	302	166	27	0
3797	100	40,1	3109	149	65	13	0
3798	73	38,0	3109	149	65	13	0
3799	62	39,1	3213	149	66	13	0
3800	53	39,0	3213	146	66	12	0
3801	80	38,8	3213	146	66	12	0
3802	69	40,2	3303	152	68	15	0
3803	49	41,2	3303	152	68	15	0
3804	59	43,5	3490	159	79	16	0
3805	70	41,5	3490	159	79	16	0
3806	63	42,3	3588	164	79	20	0
3807	54	42,8	3588	164	79	20	0
3808	54	43,6	3588	164	79	20	0
3809	86	41,7	3588	164	79	20	0
3810	85	41,6	3596	169	74	18	0
3811	62	42,3	3596	169	74	18	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3812	66	42,3	3596	169	74	18	0
3813	66	48,6	3544	159	74	16	0
3814	47	68,8	5551	300	161	38	0
3815	50	68,9	5551	300	161	38	0
3816	85	64,2	5233	263	148	29	0
3817	99	64,1	5233	263	148	29	0
3818	140	64,1	5233	263	148	29	0
3819	182	60,8	4962	262	138	24	0
3820	166	60,8	4962	262	138	24	0
3821	122	60,8	4962	262	138	24	0
3822	142	57,6	4734	236	130	24	0
3823	165	57,8	4734	236	130	24	0
3824	146	51,6	4223	215	113	21	0
3825	154	51,6	4223	215	113	21	0
3826	145	51,6	4223	215	113	21	0
3827	156	46,4	3856	196	110	16	0
3828	181	45,3	3649	195	107	28	0
3829	66	45,5	3649	195	107	28	0
3830	46	55,2	4448	232	126	31	0
3831	48	58,0	4679	247	129	34	0
3832	45	59,1	4840	244	130	26	0
3833	44	62,1	5087	262	135	26	0
3834	49	63,5	5258	258	132	26	0
3835	41	62,7	5169	270	141	22	0
3836	23	65,3	5284	301	158	33	0
3837	54	65,5	5284	301	158	33	0
3838	89	66,4	5287	292	162	42	0
3839	65	68,9	5518	291	168	45	0
3840	43	66,2	5340	293	162	28	0
3841	42	64,6	5154	293	159	38	0
3842	54	61,2	5006	262	145	26	0
3843	125	60,6	4956	267	142	25	0
3844	29	60,1	4907	272	140	24	0
3845	89	60,4	4907	272	140	24	0
3846	61	60,4	4884	280	140	28	0
3847	105	59,3	4899	251	128	20	0
3848	63	58,9	4847	256	131	20	0
3849	55	58,9	4847	256	131	20	0
3850	68	59,9	4858	270	134	29	0
3851	47	60,7	4912	266	142	34	0
3852	58	62,2	4993	285	149	34	0
3853	45	62,9	5103	275	148	37	0
3854	33	63,2	5103	275	148	37	0
3855	64	65,6	5326	299	155	35	0
3856	52	67,3	5431	280	149	28	0
3857	50	73,0	5923	324	176	34	0
3858	33	73,0	5923	324	176	34	0
3859	175	73,3	5923	324	176	34	0
3860	172	75,9	6051	352	185	40	0
3861	66	76,7	6163	332	187	40	0
3862	44	77,0	6284	338	186	38	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3863	62	77,1	6284	338	186	38	0
3864	105	75,8	6174	330	182	32	3
3865	69	74,0	6030	330	175	33	3
3866	86	72,2	5963	307	159	27	0
3867	89	73,6	5963	307	159	27	0
3868	84	70,9	5670	300	163	34	0
3869	41	70,9	5670	300	163	34	0
3870	52	69,2	5621	294	164	43	3
3871	56	69,3	5621	294	164	43	3
3872	49	69,5	5640	309	167	38	0
3873	45	69,3	5666	298	165	36	0
3874	46	69,2	5693	288	163	34	0
3875	46	69,2	5693	288	163	34	0
3876	36	68,2	5598	294	156	31	0
3877	12	68,1	5566	301	152	30	0
3878	53	67,9	5628	281	151	23	0
3879	63	72,1	5942	305	161	35	3
3880	57	72,3	5942	305	161	35	3
3881	50	73,8	6049	323	163	41	0
3882	50	74,8	6085	330	168	46	0
3883	49	75,1	6109	331	174	42	0
3884	54	72,3	5938	302	168	38	0
3885	39	69,9	5761	307	159	27	0
3886	31	66,9	5474	301	152	30	0
3887	53	62,0	5069	271	140	33	0
3888	52	59,4	4831	256	141	31	3
3889	48	58,0	4721	259	137	26	0
3890	51	56,4	4543	258	131	28	0
3891	59	52,9	4310	248	124	22	0
3892	48	51,2	4238	216	118	18	0
3893	35	51,3	4149	228	122	23	0
3894	68	46,6	3762	217	110	16	0
3895	70	46,6	3762	217	110	16	0
3896	74	41,3	3358	174	97	17	0
3897	63	56,9	4654	266	133	16	0
3898	47	50,1	4049	235	117	26	0
3899	47	50,8	4115	235	122	26	0
3900	66	50,7	4115	232	122	26	0
3901	100	52,4	4260	237	123	24	0
3902	45	54,2	4405	242	125	22	0
3903	85	27,4	2179	122	67	17	0
3904	39	37,4	2994	171	90	20	0
3905	112	34,3	2751	154	81	21	0
3906	41	31,2	2507	138	72	22	0
3907	56	17,0	1250	75	35	14	0
3908	66	19,7	1450	64	36	13	0
3909	52	53,6	4348	236	124	22	0
3910	45	54,5	4364	244	125	25	0
3911	49	54,7	4364	244	125	25	0
3912	47	52,1	4254	230	114	24	0
3913	41	50,5	4075	210	113	23	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3914	31	47,6	3834	200	108	26	0
3915	40	44,9	3657	184	99	32	0
3916	43	44,6	3620	191	98	21	7
3917	36	46,9	3864	200	102	23	0
3918	38	49,1	4026	213	104	22	0
3919	34	49,7	4118	207	101	25	0
3920	33	50,8	4198	221	109	19	0
3921	37	51,3	4224	230	109	23	0
3922	51	51,3	4247	214	109	23	0
3923	51	51,4	4216	221	109	25	0
3924	51	51,9	4218	230	113	30	0
3925	75	51,4	4204	220	116	28	0
3926	70	51,3	4204	220	116	28	0
3927	87	50,0	4069	224	110	27	0
3928	74	50,9	4122	208	108	32	0
3929	23	49,1	3984	220	108	22	0
3930	118	48,9	3984	220	108	22	0
3931	138	57,3	4748	235	123	22	0
3932	53	74,1	6068	327	157	22	0
3933	59	69,4	5799	286	152	22	0
3934	41	65,1	5368	282	148	26	0
3935	47	61,1	4994	272	141	29	0
3936	55	58,4	4662	250	134	29	0
3937	63	54,4	4333	235	126	32	0
3938	56	51,3	4126	208	120	29	0
3939	42	54,4	4356	237	124	26	0
3940	42	58,2	4717	242	129	22	0
3941	42	63,4	5242	257	137	29	0
3942	50	70,2	5766	297	160	39	0
3943	54	74,8	6144	330	165	33	0
3944	104	80,6	6626	333	176	48	0
3945	53	81,5	6622	348	179	43	6
3946	48	79,3	6470	320	174	48	0
3947	47	76,3	6281	335	165	33	0
3948	66	74,8	6214	302	154	27	0
3949	64	70,4	5772	301	148	32	0
3950	57	65,0	5333	287	142	27	0
3951	68	62,4	5125	259	133	31	0
3952	71	60,8	4933	264	131	35	6
3953	52	56,9	4599	250	121	31	0
3954	92	54,5	4363	230	123	39	0
3955	48	52,2	4235	228	112	32	0
3956	61	52,6	4367	220	114	23	0
3957	47	60,2	4943	256	131	30	0
3958	73	61,2	4943	256	131	30	0
3959	65	68,4	5666	287	150	24	7
3960	64	68,5	5666	287	150	24	7
3961	50	69,0	5678	309	154	31	0
3962	46	69,2	5581	293	157	31	0
3963	65	66,2	5308	287	147	34	0
3964	60	63,4	5134	268	142	38	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
3965	48	62,5	5158	287	139	25	0
3966	56	62,6	5158	287	139	25	0
3967	51	63,3	5252	280	143	21	0
3968	71	64,3	5252	280	143	21	0
3969	66	52,2	4317	223	119	17	0
3970	41	48,5	3945	216	108	20	0
3971	55	47,3	3804	210	107	27	0
3972	55	49,6	3967	222	114	28	0
3973	47	52,2	4186	232	123	28	0
3974	46	52,5	4260	230	120	24	0
3975	46	52,7	4260	243	121	23	0
3976	42	52,7	4294	232	116	17	0
3977	44	54,1	4383	251	129	26	0
3978	49	56,0	4431	260	130	33	0
3979	43	56,3	4482	249	133	28	0
3980	45	56,1	4516	262	138	29	0
3981	44	57,2	4554	273	131	23	0
3982	56	58,3	4718	268	136	22	0
3983	53	52,8	4265	230	124	26	0
3984	61	49,7	4009	224	110	20	0
3985	63	57,8	4671	268	130	22	0
3986	69	60,7	4908	272	140	30	0
3987	62	52,0	4194	239	123	27	6
3988	60	42,6	3418	199	98	26	0
3989	61	22,7	1821	97	53	15	0
3990	65	14,3	1148	69	38	9	0
3991	66	14,3	1148	69	38	9	0
3992	65	14,6	1132	65	38	8	0
3993	50	30,5	2439	141	74	14	0
3994	48	45,4	3703	212	109	17	0
3995	64	46,1	3701	215	108	19	0
3996	59	45,0	3644	202	106	23	0
3997	62	30,1	2377	138	71	16	0
3998	49	30,1	2377	138	71	16	0
3999	50	18,9	1520	95	55	15	0
4000	52	20,1	1650	96	55	12	0
4001	53	22,9	1700	99	58	15	0
4002	35	28,5	2306	121	65	13	0
4003	75	31,0	2486	134	71	19	0
4004	100	31,0	2486	134	71	19	0
4005	86	31,9	2571	129	74	20	0
4006	55	31,9	2605	134	72	23	0
4007	45	32,0	2598	139	68	19	0
4008	43	32,8	2636	136	74	19	0
4009	43	35,0	2782	153	75	20	0
4010	46	36,6	3004	158	77	16	0
4011	40	36,9	3028	158	78	16	0
4012	57	40,4	3335	176	85	15	0
4013	58	43,4	3548	193	90	17	0
4014	43	43,4	3548	193	90	17	0
4015	47	41,4	3359	177	89	21	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4016	36	34,2	2766	144	73	18	0
4017	32	35,8	2939	157	75	16	0
4018	38	35,9	2939	157	75	14	0
4019	34	27,9	2267	128	63	13	0
4020	45	31,0	2539	143	73	16	0
4021	42	35,0	2824	156	77	24	0
4022	35	40,2	3252	186	88	22	0
4023	37	45,7	3719	199	97	27	0
4024	39	49,7	4089	225	105	24	0
4025	46	50,1	4143	225	105	19	0
4026	38	49,9	4143	219	104	19	0
4027	43	50,0	4076	226	105	32	0
4028	50	50,1	4059	211	105	32	0
4029	40	48,1	3881	209	103	30	0
4030	50	44,1	3605	202	93	26	0
4031	37	42,7	3472	184	90	23	0
4032	45	36,4	3008	168	73	12	0
4033	49	35,3	2897	151	74	13	0
4034	44	35,0	2854	159	72	17	0
4035	43	37,1	3020	168	77	20	0
4036	43	39,1	3187	176	82	22	0
4037	43	41,2	3354	185	87	25	0
4038	49	43,5	3599	187	89	18	0
4039	34	51,2	4150	236	105	22	0
4040	26	51,7	4208	236	105	21	0
4041	26	52,3	4266	236	105	21	0
4042	43	51,6	4266	240	105	17	0
4043	39	51,0	4234	240	105	14	0
4044	40	50,8	4216	223	102	22	0
4045	42	51,2	4194	223	102	25	0
4046	50	50,8	4159	215	104	25	0
4047	48	50,4	4075	226	99	23	0
4048	47	47,4	3923	202	95	18	0
4049	51	41,3	3402	179	82	18	0
4050	42	37,3	3083	172	75	16	0
4051	41	34,6	2841	156	69	17	0
4052	47	34,1	2828	145	65	17	0
4053	47	34,4	2842	152	72	11	0
4054	51	34,7	2865	155	69	17	0
4055	55	36,2	2930	168	80	20	0
4056	49	37,0	3083	167	71	19	0
4057	54	37,3	3083	167	71	19	0
4058	54	37,5	3083	167	71	19	0
4059	51	44,3	3657	192	87	20	0
4060	51	40,7	3355	184	79	14	0
4061	37	35,8	3014	158	69	10	0
4062	43	36,1	3018	160	70	16	0
4063	46	37,6	3144	175	72	14	0
4064	45	44,0	3701	191	86	21	0
4065	35	44,9	3701	191	86	21	0
4066	42	50,2	4193	206	93	22	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4067	40	50,3	4225	218	95	15	0
4068	43	52,0	4331	232	99	16	0
4069	46	53,2	4453	224	100	18	0
4070	40	52,5	4340	236	97	16	0
4071	39	47,4	3917	202	88	16	0
4072	53	41,7	3508	194	80	10	0
4073	50	42,1	3508	194	80	10	0
4074	43	47,1	3920	217	94	10	0
4075	41	48,4	4030	211	94	19	0
4076	46	52,6	4337	229	96	14	0
4077	54	54,1	4487	244	97	11	0
4078	52	52,0	4318	228	100	14	0
4079	51	50,6	4196	223	95	12	0
4080	61	55,4	4567	251	105	14	0
4081	56	58,8	4859	255	108	17	0
4082	58	57,0	4677	260	104	21	0
4083	54	54,7	4511	259	104	23	0
4084	51	56,7	4738	256	113	14	0
4085	56	59,2	4950	279	115	10	0
4086	63	54,4	4521	247	101	11	0
4087	85	57,1	4735	270	105	12	0
4088	63	58,0	4796	278	108	13	0
4089	61	52,3	4318	244	102	15	0
4090	53	54,5	4448	256	100	22	0
4091	49	14,8	1218	74	31	6	0
4092	48	23,7	1972	120	48	5	0
4093	49	31,5	2642	149	64	5	0
4094	62	34,6	2918	166	66	5	0
4095	53	25,3	2031	112	46	5	0
4096	69	29,6	2463	141	61	5	0
4097	39	29,0	2402	123	58	9	0
4098	70	28,4	2332	121	57	11	0
4099	69	27,8	2291	127	54	8	0
4100	72	27,8	2291	127	54	8	0
4101	79	27,7	2302	116	55	6	0
4102	73	27,9	2302	125	51	12	0
4103	73	28,0	2302	125	51	12	0
4104	79	28,2	2342	119	52	10	0
4105	82	28,6	2393	128	55	10	0
4106	93	29,5	2473	135	57	9	0
4107	85	29,5	2473	135	57	9	0
4108	83	33,5	2788	149	62	8	0
4109	95	36,3	2999	172	72	10	0
4110	88	36,3	2999	172	72	10	0
4111	94	38,1	3161	181	70	10	0
4112	72	39,0	3247	178	72	11	0
4113	87	39,0	3247	178	72	11	0
4114	97	38,2	3200	179	72	5	0
4115	103	38,2	3200	179	72	5	0
4116	94	35,2	2910	170	69	7	0
4117	79	31,5	2620	148	56	13	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4118	102	31,8	2620	148	56	13	0
4119	100	29,5	2476	141	53	8	0
4120	108	29,5	2476	141	53	8	0
4121	106	29,5	2476	141	53	8	0
4122	109	29,5	2476	141	53	8	0
4123	94	29,0	2443	134	54	9	0
4124	95	28,9	2443	134	54	9	0
4125	96	29,3	2471	143	57	6	0
4126	94	29,3	2471	143	57	6	0
4127	61	29,7	2471	143	57	6	0
4128	94	29,9	2502	147	53	5	0
4129	87	29,9	2502	147	53	5	0
4130	82	29,5	2537	137	51	7	0
4131	104	29,8	2537	137	51	7	0
4132	105	30,1	2537	137	51	7	0
4133	78	30,7	2583	140	52	7	0
4134	92	32,0	2657	160	59	7	0
4135	79	32,8	2749	151	59	6	0
4136	81	33,6	2841	161	62	5	0
4137	66	34,6	2923	171	66	5	0
4138	90	34,9	2923	171	66	5	0
4139	82	35,7	3019	168	66	5	0
4140	89	36,7	3098	187	69	6	0
4141	94	36,9	3098	187	69	6	0
4142	101	37,4	3187	172	62	6	0
4143	93	37,6	3187	172	62	6	0
4144	101	38,3	3260	180	68	6	0
4145	120	39,7	3354	192	71	6	0
4146	88	39,7	3354	192	71	6	0
4147	108	39,7	3354	192	71	6	0
4148	129	42,0	3546	196	80	7	0
4149	110	42,9	3576	208	79	7	0
4150	105	43,0	3576	208	79	7	0
4151	118	43,2	3612	215	75	5	0
4152	97	43,3	3612	215	75	5	0
4153	106	43,8	3696	205	80	9	0
4154	96	44,3	3696	205	80	9	0
4155	109	44,9	3732	214	83	9	0
4156	109	45,5	3768	222	86	9	0
4157	114	45,5	3768	222	86	9	0
4158	114	45,5	3768	222	86	9	0
4159	112	45,3	3790	215	84	9	0
4160	112	45,2	3813	208	83	9	0
4161	89	45,2	3813	208	83	9	0
4162	110	47,9	4046	229	88	7	0
4163	96	54,7	4562	269	102	9	0
4164	95	55,0	4562	269	102	9	0
4165	108	59,1	5004	282	102	8	0
4166	92	59,3	5004	282	102	8	0
4167	83	62,5	5219	312	116	13	0
4168	94	62,5	5219	312	116	13	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4169	95	63,2	5280	308	118	14	0
4170	99	63,9	5340	303	120	15	0
4171	44	61,6	5155	282	115	18	0
4172	57	61,4	5100	287	115	17	0
4173	54	62,5	5161	306	116	15	0
4174	58	71,9	5949	350	134	18	0
4175	55	71,9	5949	350	134	18	0
4176	58	71,8	6023	328	136	16	0
4177	54	65,5	5493	301	121	12	0
4178	62	55,0	4561	266	108	10	0
4179	54	47,5	3927	237	93	7	0
4180	58	45,7	3794	212	87	14	0
4181	58	48,0	3949	230	98	17	0
4182	57	46,1	3836	217	98	15	0
4183	52	42,7	3553	209	90	12	0
4184	47	40,7	3374	202	87	12	0
4185	115	41,0	3374	202	87	12	0
4186	125	40,0	3313	192	82	10	0
4187	155	40,0	3313	192	82	10	0
4188	96	35,9	3006	165	70	8	0
4189	131	31,6	2665	147	67	5	0
4190	78	31,6	2665	147	67	5	0
4191	85	56,4	4304	253	115	21	0
4192	35	43,2	3472	197	95	14	0
4193	45	39,7	3251	176	87	15	0
4194	73	40,4	3251	176	87	15	0
4195	73	39,1	3166	176	83	8	0
4196	72	38,5	3167	174	86	10	0
4197	90	38,9	3167	180	89	14	0
4198	56	39,3	3165	189	97	16	0
4199	76	39,7	3165	189	97	16	0
4200	80	40,5	3213	182	103	23	0
4201	78	40,5	3246	196	106	17	0
4202	78	41,9	3246	196	106	17	0
4203	87	44,4	3391	199	114	30	0
4204	84	45,9	3532	212	112	24	0
4205	73	48,7	3800	211	120	22	5
4206	67	51,9	4080	234	127	25	0
4207	77	53,5	4366	254	139	28	0
4208	76	55,4	4366	254	139	28	0
4209	81	58,9	4678	260	143	31	0
4210	67	60,6	4882	283	144	37	0
4211	72	60,8	4882	283	144	37	0
4212	80	63,3	5128	280	144	42	0
4213	88	63,5	5128	280	145	42	0
4214	88	67,1	5432	297	148	46	0
4215	81	71,2	5661	324	148	41	7
4216	75	73,1	5892	316	148	34	6
4217	90	75,0	6105	344	148	38	6
4218	91	75,0	6105	344	149	38	6
4219	81	76,1	6237	349	150	30	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4220	85	77,1	6237	349	176	30	0
4221	85	77,4	6237	349	176	30	0
4222	77	78,3	6363	337	173	30	0
4223	90	78,3	6363	337	173	30	0
4224	90	78,4	6363	337	173	30	0
4225	48	78,3	6439	353	175	25	0
4226	80	79,4	6499	368	181	29	0
4227	73	80,5	6595	351	187	36	7
4228	77	80,5	6595	351	187	36	7
4229	84	81,5	6639	376	188	39	7
4230	69	81,1	6557	386	191	45	6
4231	60	80,8	6571	364	189	41	7
4232	81	80,9	6571	364	189	41	7
4233	87	82,0	6534	372	190	39	6
4234	85	83,1	6684	361	188	35	6
4235	83	83,1	6684	361	188	35	6
4236	80	82,2	6674	374	186	28	6
4237	69	81,0	6639	356	186	34	9
4238	85	81,0	6639	356	186	34	9
4239	104	79,1	6531	344	178	27	0
4240	94	79,1	6531	344	178	27	0
4241	90	72,7	5974	336	164	25	0
4242	94	73,7	5974	336	164	25	0
4243	95	65,3	5248	299	146	26	0
4244	76	59,0	4866	264	131	24	0
4245	74	57,1	4665	264	128	29	0
4246	78	56,3	4634	244	125	23	0
4247	84	56,4	4634	244	125	23	0
4248	56	56,9	4680	258	127	21	0
4249	67	59,3	4796	273	131	24	0
4250	65	59,7	4917	260	129	14	0
4251	74	60,4	4996	273	134	14	0
4252	73	60,4	4996	273	134	14	0
4253	39	60,4	4996	273	134	14	0
4254	82	61,1	5034	286	135	15	0
4255	39	62,2	5127	276	139	22	0
4256	74	62,2	5127	276	139	22	0
4257	71	63,2	5179	279	140	28	0
4258	64	64,4	5213	284	142	28	0
4259	65	66,2	5333	301	147	34	0
4260	60	65,4	5364	291	147	28	0
4261	61	66,0	5364	289	146	26	9
4262	52	63,3	5175	267	142	20	9
4263	49	60,3	4973	269	141	20	0
4264	54	59,6	4870	269	137	25	0
4265	71	60,8	4965	266	139	32	0
4266	81	60,5	4965	266	139	32	0
4267	62	65,2	5211	295	147	35	8
4268	89	66,1	5258	295	153	37	8
4269	77	64,5	5258	281	153	37	0
4270	79	64,5	5258	281	153	37	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4271	73	61,1	4960	267	134	33	0
4272	66	65,7	5334	292	147	32	0
4273	61	65,2	5334	292	147	32	0
4274	90	66,2	5430	292	147	32	0
4275	108	65,4	5430	292	143	25	0
4276	94	66,5	5489	272	139	22	5
4277	72	66,8	5489	272	139	28	5
4278	72	62,7	5133	271	128	28	0
4279	80	57,7	4752	258	126	24	0
4280	52	57,4	4717	247	124	30	0
4281	73	67,0	5476	279	144	38	0
4282	63	64,3	5248	289	146	40	0
4283	56	69,4	5530	314	171	40	0
4284	50	58,2	4519	257	140	38	10
4285	48	28,9	2281	126	74	13	0
4286	36	27,2	2224	124	66	11	0
4287	91	29,3	2340	130	73	20	0
4288	92	29,1	2340	130	73	20	0
4289	89	29,8	2401	130	73	20	0
4290	96	29,6	2401	128	70	20	0
4291	95	29,0	2391	121	68	17	0
4292	98	29,8	2405	130	72	20	0
4293	89	29,8	2405	130	72	20	0
4294	94	30,7	2486	134	71	16	0
4295	77	32,8	2643	137	76	26	0
4296	67	33,4	2686	142	76	26	0
4297	99	33,2	2686	142	74	22	0
4298	111	32,9	2686	142	72	18	0
4299	99	33,2	2689	136	74	18	0
4300	108	33,9	2751	140	74	18	0
4301	102	33,4	2751	140	70	15	0
4302	113	34,3	2813	150	72	15	0
4303	130	33,6	2813	150	72	12	0
4304	110	34,7	2875	150	72	18	0
4305	101	34,7	2875	148	72	18	0
4306	117	35,3	2902	156	72	22	0
4307	107	35,0	2902	156	72	22	0
4308	98	35,9	2988	150	77	16	0
4309	70	37,2	3083	158	77	22	0
4310	93	36,7	3083	158	73	22	0
4311	99	38,1	3175	169	77	19	0
4312	110	39,5	3267	180	81	16	0
4313	118	40,8	3396	180	81	16	0
4314	118	42,1	3525	180	81	16	0
4315	103	42,0	3525	180	80	16	0
4316	120	42,0	3525	180	80	16	0
4317	120	41,9	3525	180	79	16	0
4318	92	44,2	3714	189	85	16	0
4319	91	44,1	3714	189	85	16	0
4320	104	45,1	3815	186	88	15	6
4321	98	45,5	3826	193	92	15	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4322	93	45,1	3826	193	92	13	0
4323	84	48,5	4067	214	94	19	0
4324	61	49,4	4081	214	100	19	0
4325	107	49,3	4081	212	100	18	0
4326	107	49,3	4081	210	100	18	0
4327	107	49,2	4081	208	100	17	0
4328	72	48,8	3988	216	100	25	8
4329	86	48,3	3952	216	100	25	8
4330	83	49,1	4023	216	102	25	8
4331	84	49,6	4097	221	110	20	0
4332	96	49,4	4097	221	110	18	0
4333	100	51,0	4212	229	115	23	0
4334	92	50,7	4212	229	115	23	0
4335	100	52,0	4300	226	116	17	0
4336	73	52,4	4300	232	118	19	0
4337	86	51,8	4246	232	118	19	0
4338	88	50,5	4196	229	110	14	0
4339	83	51,0	4196	229	110	19	0
4340	75	50,3	4161	215	108	19	0
4341	73	49,2	4118	214	100	16	0
4342	82	49,5	4118	214	100	23	0
4343	89	47,4	3942	193	97	23	0
4344	71	45,5	3762	197	97	19	0
4345	57	46,8	3894	197	100	19	0
4346	47	50,6	4218	217	101	21	0
4347	76	56,4	4693	251	117	21	0
4348	86	63,4	5247	256	132	18	0
4349	44	63,4	5247	256	132	18	0
4350	64	70,2	5817	306	154	29	0
4351	89	80,2	6458	338	187	36	0
4352	98	80,2	6458	338	187	36	0
4353	77	86,8	6917	371	211	42	9
4354	93	91,0	7161	412	228	54	9
4355	103	90,6	7161	412	228	54	0
4356	117	93,5	7294	412	233	65	0
4357	107	93,2	7294	397	233	65	0
4358	122	93,3	7294	397	233	65	0
4359	98	87,7	7016	387	230	64	0
4360	109	87,8	7016	387	230	64	0
4361	106	84,7	6772	384	218	60	0
4362	110	81,5	6528	381	205	56	0
4363	101	76,5	6226	339	187	40	0
4364	119	77,7	6226	339	187	40	0
4365	116	74,4	5951	326	179	40	0
4366	132	71,1	5676	314	170	39	0
4367	147	71,1	5676	314	170	39	0
4368	111	65,5	5315	282	168	35	0
4369	120	61,8	5020	266	158	32	0
4370	124	61,6	5020	266	145	36	0
4371	104	59,2	4844	258	138	36	0
4372	81	59,8	4868	263	138	36	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4373	97	59,5	4868	263	138	31	0
4374	107	60,0	4882	269	138	33	3
4375	116	60,4	4895	274	138	35	6
4376	86	55,4	4459	256	131	34	6
4377	109	56,0	4511	256	131	34	6
4378	107	54,9	4511	244	126	26	0
4379	103	75,8	6153	360	174	31	0
4380	106	55,8	4513	258	134	25	0
4381	134	35,9	2874	157	94	20	0
4382	175	33,2	2680	146	84	15	0
4383	149	33,0	2604	145	83	19	0
4384	94	33,0	2604	145	83	19	0
4385	141	31,7	2523	146	79	23	0
4386	147	31,7	2523	146	79	23	0
4387	126	32,1	2523	146	79	23	0
4388	115	31,2	2480	136	78	18	0
4389	121	31,4	2480	139	79	21	0
4390	102	30,9	2464	139	79	21	0
4391	98	31,1	2464	146	80	21	0
4392	114	32,0	2501	146	80	17	0
4393	113	31,7	2501	139	80	16	0
4394	112	31,4	2501	133	79	14	0
4395	111	32,2	2579	144	84	19	0
4396	107	32,2	2579	144	84	19	0
4397	127	33,9	2698	157	85	19	0
4398	102	35,0	2790	157	86	17	0
4399	98	36,0	2882	157	86	15	0
4400	110	37,3	2975	171	89	18	0
4401	98	36,4	2975	171	89	18	0
4402	100	37,1	3007	171	89	21	0
4403	147	36,5	3007	156	86	21	0
4404	119	36,7	3007	163	87	21	0
4405	109	36,4	2993	163	87	20	0
4406	104	37,8	3033	176	95	23	0
4407	95	37,8	3033	176	95	23	0
4408	93	38,4	3079	176	97	23	0
4409	102	38,9	3125	176	99	23	0
4410	102	39,5	3171	176	101	23	0
4411	57	39,0	3171	176	101	21	0
4412	105	40,3	3239	181	101	23	0
4413	105	41,6	3308	185	101	25	0
4414	85	44,8	3514	213	119	25	0
4415	93	47,1	3750	236	128	24	0
4416	84	46,9	3750	236	128	20	0
4417	77	51,6	4065	255	151	27	0
4418	83	53,3	4154	272	157	34	0
4419	96	53,2	4154	272	157	34	0
4420	97	53,2	4154	272	157	34	0
4421	123	53,0	4118	252	156	34	0
4422	104	53,0	4118	252	156	34	0
4423	106	51,3	3956	247	148	36	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4424	71	44,0	3506	209	118	24	0
4425	101	43,8	3506	209	118	22	0
4426	111	43,9	3522	209	118	22	0
4427	97	44,1	3537	209	118	22	0
4428	113	43,6	3537	197	116	18	0
4429	83	39,1	3164	185	107	20	0
4430	87	39,1	3164	185	107	20	0
4431	112	23,4	1811	109	64	11	0
4432	102	23,4	1811	109	64	11	0
4433	112	16,5	1312	77	46	5	0
4434	112	9,7	814	46	28	0	0
4435	119	9,7	814	46	28	0	0
4436	95	6,9	572	34	21	0	0
4437	112	4,1	330	21	14	0	0
4438	109	1,4	129	6	0	0	0
4439	129	2,3	194	11	7	0	0
4440	96	3,3	260	16	15	0	0
4441	100	3,3	260	16	15	0	0
4442	119	17,4	1384	83	47	13	0
4443	110	17,4	1384	83	47	13	0
4444	109	17,4	1384	83	47	13	0
4445	108	29,0	2335	137	81	17	0
4446	108	29,0	2335	137	81	17	0
4447	105	34,0	2732	151	87	17	0
4448	95	34,0	2732	151	87	17	0
4449	108	36,7	2965	165	91	17	0
4450	120	35,9	2965	165	91	15	0
4451	117	37,3	3011	172	93	18	0
4452	98	38,7	3056	178	95	21	0
4453	109	38,7	3056	178	95	21	0
4454	88	39,6	3119	178	101	24	0
4455	96	39,0	3119	174	101	24	0
4456	109	38,7	3075	174	99	25	0
4457	102	38,3	3031	174	98	26	0
4458	99	40,1	3177	186	98	26	0
4459	102	40,9	3252	186	100	25	0
4460	97	41,7	3326	186	103	24	0
4461	125	41,1	3326	186	103	21	0
4462	120	41,1	3326	186	103	21	0
4463	114	41,1	3326	186	103	21	0
4464	105	38,8	3162	178	93	15	0
4465	131	39,2	3162	178	93	15	0
4466	132	37,1	3033	163	92	14	0
4467	128	39,0	3138	179	92	16	0
4468	128	38,2	3138	179	82	13	0
4469	118	40,4	3323	179	93	13	0
4470	104	40,3	3323	178	93	13	0
4471	115	40,7	3323	178	93	22	0
4472	113	38,8	3143	172	92	25	0
4473	96	35,9	2921	149	79	23	0
4474	89	120,7	9868	552	258	50	4

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4475	140	80,4	6551	368	181	36	0
4476	140	40,3	3234	184	104	22	0
4477	85	38,4	3100	175	92	22	0
4478	100	38,9	3108	175	98	25	0
4479	114	39,1	3129	173	98	25	0
4480	112	39,8	3192	188	101	21	0
4481	78	39,7	3192	188	101	21	0
4482	61	40,4	3199	199	106	21	0
4483	90	40,5	3202	199	106	21	0
4484	96	39,6	3202	178	101	21	0
4485	112	40,2	3202	186	101	21	0
4486	96	40,1	3194	186	100	21	0
4487	108	40,4	3229	186	100	21	0
4488	87	39,8	3229	178	100	21	0
4489	103	40,6	3273	192	102	21	0
4490	98	41,3	3360	181	100	22	0
4491	74	42,3	3435	188	104	21	0
4492	76	42,3	3435	188	104	21	0
4493	94	43,4	3522	202	104	21	0
4494	80	44,8	3647	202	103	22	0
4495	93	44,6	3647	192	103	22	0
4496	74	46,7	3790	209	107	22	0
4497	83	48,9	3931	227	113	23	0
4498	74	50,6	4132	227	119	23	0
4499	87	50,5	4132	223	119	24	0
4500	92	52,3	4265	234	125	24	0
4501	99	52,1	4265	234	125	25	0
4502	91	54,9	4495	237	132	25	0
4503	100	54,9	4495	237	132	26	0
4504	122	56,2	4590	244	135	26	0
4505	49	57,4	4686	250	138	26	0
4506	76	59,5	4929	273	139	26	0
4507	85	62,7	5159	270	150	26	0
4508	93	64,1	5263	285	153	27	0
4509	99	65,6	5367	300	157	27	0
4510	123	65,3	5367	300	157	27	0
4511	91	67,8	5547	313	160	27	0
4512	116	70,6	5798	313	166	27	0
4513	98	70,2	5798	297	166	28	0
4514	89	70,3	5798	297	166	29	0
4515	92	73,0	5994	322	170	29	0
4516	80	73,6	5994	338	184	29	0
4517	85	73,1	5959	338	184	30	0
4518	76	75,1	6120	337	189	31	0
4519	93	77,4	6274	362	199	31	0
4520	84	78,9	6391	374	200	32	0
4521	79	80,4	6530	374	202	32	0
4522	77	80,2	6530	363	202	33	0
4523	64	80,9	6547	379	207	34	0
4524	38	80,6	6547	379	207	34	0
4525	79	81,6	6585	353	196	33	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4526	88	81,9	6585	364	196	35	0
4527	70	79,6	6485	364	193	35	0
4528	100	77,8	6308	362	184	35	0
4529	133	77,9	6308	362	184	36	0
4530	97	76,1	6172	361	187	36	0
4531	67	74,7	6099	331	187	35	0
4532	53	75,0	6099	331	187	36	0
4533	47	70,9	5758	315	180	36	0
4534	59	71,0	5758	315	180	35	0
4535	27	71,0	5758	315	180	34	0
4536	58	68,2	5406	322	173	34	0
4537	78	68,2	5406	322	173	34	0
4538	79	66,7	5400	304	170	34	0
4539	72	66,9	5421	311	168	33	0
4540	65	66,8	5471	293	159	33	0
4541	74	66,9	5471	293	159	32	0
4542	85	68,2	5432	300	160	32	0
4543	44	66,1	5254	291	159	32	0
4544	47	64,1	5077	281	159	32	0
4545	62	58,7	4727	264	146	32	0
4546	57	63,9	5154	282	163	36	0
4547	84	65,4	5154	282	163	35	0
4548	59	67,0	5270	302	165	36	0
4549	47	55,9	4493	245	142	33	0
4550	50	48,3	3799	217	124	27	0
4551	60	43,4	3391	187	114	27	0
4552	63	38,6	3023	168	99	24	0
4553	70	38,9	3017	170	101	28	6
4554	69	39,3	3017	170	102	37	6
4555	90	39,6	3042	180	102	37	6
4556	91	39,5	3042	180	102	37	6
4557	76	36,6	2836	170	96	28	6
4558	54	36,6	2836	170	96	28	6
4559	83	35,8	2856	160	96	25	0
4560	65	28,6	2293	129	75	20	0
4561	89	17,1	1360	80	41	16	0
4562	86	17,1	1360	80	41	16	0
4563	92	17,1	1360	80	41	16	0
4564	109	11,5	850	54	34	14	0
4565	113	13,2	949	58	51	15	0
4566	117	18,9	1470	90	51	15	0
4567	106	20,4	1470	90	75	15	0
4568	113	27,9	2148	122	75	19	0
4569	67	32,7	2552	153	89	28	0
4570	58	33,3	2552	153	93	28	0
4571	84	12,1	914	58	32	21	0
4572	48	17,2	1346	71	39	22	0
4573	37	14,7	1161	64	34	19	0
4574	48	14,1	1096	59	37	18	0
4575	51	13,1	1054	53	29	9	0
4576	52	13,8	1099	61	34	9	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4577	60	15,4	1236	67	36	15	0
4578	46	16,5	1325	66	34	14	0
4579	61	18,1	1427	72	38	22	0
4580	54	19,2	1552	79	43	20	0
4581	53	21,6	1758	90	44	18	0
4582	57	24,3	1955	105	46	20	0
4583	67	26,9	2188	109	55	21	0
4584	60	28,8	2351	119	57	23	0
4585	65	30,2	2478	134	60	18	0
4586	70	31,3	2594	130	61	19	0
4587	60	32,4	2693	125	61	26	0
4588	27	30,9	2586	122	58	25	0
4589	33	31,1	2615	124	60	18	0
4590	54	29,5	2492	123	48	17	0
4591	47	29,6	2515	128	51	10	0
4592	56	29,2	2495	117	53	11	0
4593	71	27,8	2355	120	51	12	0
4594	54	27,9	2352	122	52	12	0
4595	61	27,1	2297	120	49	8	0
4596	59	28,6	2405	117	48	10	0
4597	55	27,8	2389	123	51	8	0
4598	59	28,4	2424	114	50	12	0
4599	55	31,2	2590	130	58	20	0
4600	43	31,4	2627	139	57	12	0
4601	52	31,8	2636	130	60	16	0
4602	33	34,4	2878	147	60	13	0
4603	57	34,4	2878	147	60	13	0
4604	67	36,5	3071	159	67	13	0
4605	79	37,2	3126	168	65	13	0
4606	71	36,6	3068	152	67	12	0
4607	55	35,2	2921	149	58	22	0
4608	38	34,1	2858	146	58	20	0
4609	47	34,4	2864	141	60	21	0
4610	51	32,6	2720	144	60	20	0
4611	51	31,6	2629	145	60	13	0
4612	29	31,5	2638	129	55	14	0
4613	31	30,3	2528	130	52	12	0
4614	34	33,0	2752	134	55	16	0
4615	39	33,3	2812	136	61	17	0
4616	52	34,2	2876	148	60	20	0
4617	53	34,3	2902	146	60	18	0
4618	54	34,6	2906	149	60	23	0
4619	75	34,8	2906	149	60	23	0
4620	84	34,8	2920	151	64	15	0
4621	81	35,2	2966	142	61	25	0
4622	94	28,3	2347	129	54	18	0
4623	53	34,6	2852	140	62	19	0
4624	85	34,7	2852	140	62	19	0
4625	88	33,3	2770	138	61	21	0
4626	92	30,3	2506	134	56	17	0
4627	87	30,3	2506	134	56	17	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4628	83	28,5	2390	133	55	14	0
4629	89	25,5	2128	112	49	14	0
4630	79	26,0	2128	112	49	14	0
4631	79	23,5	1918	96	48	14	0
4632	77	23,8	1950	101	45	19	0
4633	74	23,8	1950	101	45	19	0
4634	83	28,1	2346	120	52	21	0
4635	89	28,0	2346	120	52	17	0
4636	84	26,2	2217	104	45	17	0
4637	78	26,4	2219	114	49	14	0
4638	56	27,9	2315	116	51	14	0
4639	49	28,5	2380	122	52	14	0
4640	72	28,5	2380	122	52	14	0
4641	75	32,8	2785	151	60	9	0
4642	81	31,7	2693	139	58	12	0
4643	82	29,5	2490	132	54	14	0
4644	93	29,8	2490	132	54	14	0
4645	73	31,5	2632	138	59	15	0
4646	63	32,8	2795	139	59	15	0
4647	74	36,1	3081	153	63	11	0
4648	65	36,1	3081	153	63	11	0
4649	83	34,5	2881	153	64	17	0
4650	78	34,9	2923	152	60	19	0
4651	85	34,9	2960	158	64	11	0
4652	89	35,0	2960	158	64	11	0
4653	95	38,4	3195	161	66	22	0
4654	100	44,6	3743	198	78	14	0
4655	92	44,8	3743	198	78	14	0
4656	91	52,5	4413	218	93	18	0
4657	97	52,6	4413	218	93	16	0
4658	92	27,1	2292	115	49	14	0
4659	93	36,8	3100	148	64	20	0
4660	94	37,0	3100	148	64	21	0
4661	94	39,9	3312	168	69	22	0
4662	64	41,0	3433	170	72	23	0
4663	76	50,6	4223	209	87	24	0
4664	73	29,0	2323	140	69	17	0
4665	49	29,1	2323	140	69	17	0
4666	52	26,3	2107	121	63	17	0
4667	101	26,4	2107	121	63	17	0
4668	72	25,9	2088	110	61	17	0
4669	80	24,5	1990	104	59	17	0
4670	75	24,5	1990	104	59	18	0
4671	89	23,6	1924	105	55	18	0
4672	88	24,2	1963	109	57	20	0
4673	75	24,5	1963	109	57	20	0
4674	71	26,0	2090	117	60	20	0
4675	86	25,2	2090	117	60	10	0
4676	82	26,8	2170	125	62	16	0
4677	86	28,8	2325	137	66	18	0
4678	88	28,8	2325	137	66	18	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4679	86	30,7	2473	137	66	22	0
4680	78	32,9	2704	142	70	16	0
4681	80	32,9	2704	142	70	16	0
4682	78	35,2	2896	157	75	21	0
4683	88	37,0	3072	157	75	21	0
4684	82	40,3	3346	163	87	21	0
4685	75	40,2	3346	163	87	17	0
4686	80	46,1	3799	181	94	35	0
4687	95	47,7	3907	188	99	38	0
4688	86	47,6	3907	188	99	38	0
4689	100	48,5	3967	205	99	38	0
4690	92	47,9	3967	205	96	28	0
4691	98	47,9	3967	205	96	28	0
4692	126	49,6	4139	203	94	26	0
4693	122	49,6	4139	203	94	26	0
4694	134	52,7	4408	224	103	20	0
4695	109	52,7	4408	224	103	20	0
4696	118	55,8	4650	230	111	27	0
4697	122	55,8	4650	230	111	27	0
4698	133	57,3	4750	238	107	42	0
4699	118	57,3	4750	238	107	42	0
4700	115	57,6	4775	238	107	43	0
4701	139	57,1	4775	224	103	43	0
4702	104	57,3	4775	230	103	43	0
4703	122	54,9	4575	230	102	33	0
4704	104	54,9	4575	230	102	33	0
4705	85	54,9	4575	230	102	33	0
4706	82	50,7	4243	217	86	33	0
4707	115	53,1	4474	202	94	39	0
4708	101	52,8	4474	202	94	39	0
4709	99	53,1	4474	202	94	39	0
4710	115	45,7	3882	178	86	17	0
4711	95	46,0	3882	178	86	26	0
4712	101	32,9	2791	119	60	26	0
4713	91	36,4	3090	143	70	25	0
4714	115	60,8	4974	246	114	51	0
4715	91	60,8	4974	246	114	51	0
4716	94	74,0	6134	291	141	52	0
4717	81	81,3	6711	330	155	59	0
4718	76	82,8	6824	345	160	59	0
4719	102	84,4	6936	360	165	59	0
4720	93	91,4	7471	360	181	68	0
4721	54	91,4	7471	360	181	68	0
4722	114	104,8	8590	421	210	77	0
4723	107	103,6	8590	421	210	77	0
4724	98	100,3	8288	415	202	78	0
4725	117	100,3	8288	415	202	78	0
4726	113	100,3	8288	415	202	78	0
4727	113	85,1	7089	326	168	69	0
4728	124	90,0	7461	347	176	78	0
4729	114	90,0	7461	347	176	78	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4730	132	108,5	9041	401	212	86	8
4731	126	108,6	9041	401	212	86	8
4732	102	108,9	9097	410	210	83	6
4733	90	109,0	9097	410	210	83	6
4734	94	109,1	9097	410	210	83	6
4735	96	97,7	7974	391	186	84	0
4736	111	90,2	7423	348	174	58	0
4737	94	82,5	6868	331	163	58	0
4738	97	83,3	6868	331	163	58	0
4739	100	70,2	5772	272	140	51	0
4740	90	53,6	4401	201	106	43	0
4741	96	53,2	4401	201	106	43	0
4742	82	65,8	5410	267	128	52	0
4743	89	75,2	6167	278	147	66	0
4744	99	96,9	8005	386	190	73	0
4745	109	96,9	8005	386	190	73	0
4746	98	91,3	7566	379	178	62	0
4747	92	90,9	7566	379	178	62	0
4748	89	35,3	2928	152	77	26	0
4749	126	18,1	1474	75	43	14	0
4750	122	26,4	2207	110	57	12	0
4751	134	27,1	2252	118	56	18	0
4752	128	27,1	2252	118	56	18	0
4753	112	27,1	2252	118	56	18	0
4754	106	14,6	1238	63	34	5	0
4755	98	14,6	1238	63	34	5	0
4756	91	14,8	1238	63	34	5	0
4757	103	14,7	1237	62	33	4	0
4758	78	14,4	1236	61	32	3	0
4759	84	14,4	1236	61	32	3	0
4760	83	17,2	1236	61	32	3	0
4761	89	29,5	2346	128	72	28	0
4762	85	28,6	2292	122	69	33	0
4763	120	29,3	2292	122	69	33	0
4764	150	40,4	3188	181	102	39	0
4765	135	41,2	3188	181	102	39	0
4766	106	50,0	3919	224	119	47	0
4767	102	50,0	3919	224	119	47	0
4768	115	45,3	3636	192	108	47	0
4769	91	45,9	3636	192	108	47	0
4770	127	44,6	3511	188	103	51	0
4771	78	45,3	3639	178	107	50	0
4772	126	45,3	3639	178	107	50	0
4773	94	45,4	3639	178	107	50	0
4774	141	43,6	3508	171	102	46	0
4775	136	44,1	3508	187	102	46	0
4776	130	43,1	3419	187	100	46	0
4777	128	43,1	3419	187	100	46	0
4778	125	43,6	3446	168	97	51	0
4779	95	43,6	3446	168	97	51	0
4780	131	37,3	2988	155	86	40	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4781	108	37,3	2988	155	86	40	0
4782	95	26,3	2117	113	67	14	0
4783	112	26,6	2117	113	67	14	0
4784	108	28,0	2299	121	70	7	0
4785	108	28,5	2299	121	70	7	0
4786	101	45,8	3624	202	115	45	0
4787	134	46,0	3624	202	115	45	0
4788	115	54,5	4370	221	125	57	0
4789	135	54,5	4370	221	125	57	0
4790	117	57,6	4648	237	125	59	0
4791	152	57,6	4648	237	125	59	0
4792	158	62,1	5022	258	138	62	0
4793	98	62,1	5022	258	138	62	0
4794	133	65,3	5324	258	140	68	0
4795	135	65,3	5324	258	140	68	0
4796	145	65,4	5324	258	140	68	0
4797	128	65,2	5324	250	138	70	0
4798	134	66,3	5324	250	138	70	0
4799	121	66,3	5306	256	136	74	0
4800	135	66,3	5306	256	136	74	0
4801	154	62,8	5139	250	133	59	0
4802	134	62,8	5139	250	133	59	0
4803	135	62,8	5139	250	133	59	0
4804	142	41,5	3391	177	86	40	0
4805	146	41,5	3391	177	86	40	0
4806	158	31,8	2625	127	71	27	0
4807	138	31,8	2625	127	71	27	0
4808	167	31,9	2625	127	71	27	0
4809	141	40,7	3371	168	84	34	0
4810	141	40,7	3371	168	84	34	0
4811	140	37,5	3118	162	79	29	0
4812	119	37,5	3118	162	79	29	0
4813	110	31,7	2601	131	67	30	0
4814	105	32,0	2601	131	67	30	0
4815	135	29,6	2402	120	63	28	0
4816	120	29,6	2402	120	63	28	0
4817	148	30,9	2481	128	62	31	0
4818	136	30,9	2481	128	62	31	0
4819	154	30,9	2481	128	62	31	0
4820	136	37,9	3149	148	74	31	0
4821	156	37,9	3149	148	74	31	0
4822	159	38,3	3149	148	74	31	0
4823	154	40,3	3264	164	84	40	0
4824	148	31,4	2610	132	69	25	0
4825	149	31,4	2610	132	69	25	0
4826	147	31,4	2610	132	69	25	0
4827	168	29,2	2396	122	65	30	0
4828	156	29,3	2396	122	65	30	0
4829	100	37,4	3086	160	81	32	0
4830	139	37,4	3086	160	81	32	0
4831	112	52,6	4408	217	107	40	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4832	106	51,1	4240	213	104	41	0
4833	94	49,7	4072	210	101	42	0
4834	88	43,1	3563	190	90	31	0
4835	113	43,1	3563	190	90	31	0
4836	122	43,3	3563	190	90	31	0
4837	141	37,3	3081	148	79	36	0
4838	126	37,7	3081	148	79	36	0
4839	135	35,1	2843	146	76	34	0
4840	145	35,1	2843	146	76	34	0
4841	143	42,2	3470	173	85	39	0
4842	128	42,2	3470	173	85	39	0
4843	173	50,8	4195	199	101	46	0
4844	181	59,4	4919	225	117	54	0
4845	98	59,4	4919	225	117	54	0
4846	136	46,6	3854	191	92	39	0
4847	164	46,6	3854	191	92	39	0
4848	182	46,6	3854	191	92	39	0
4849	164	39,1	3237	170	79	33	0
4850	206	53,8	4407	233	107	47	0
4851	106	53,8	4407	233	107	47	0
4852	201	71,6	5884	302	139	56	3
4853	155	89,4	7361	372	172	66	6
4854	106	89,1	7361	372	172	66	3
4855	85	88,8	7361	372	172	66	0
4856	99	30,2	2296	131	74	43	0
4857	99	27,9	2174	117	69	39	0
4858	101	28,0	2152	117	69	39	0
4859	119	28,2	2131	116	69	39	0
4860	105	26,0	1997	104	64	33	0
4861	139	26,0	1997	104	64	33	0
4862	120	26,0	1997	104	64	33	0
4863	150	26,6	2048	110	68	34	0
4864	220	27,1	2098	116	72	35	0
4865	181	28,4	2199	130	72	36	0
4866	150	28,6	2209	130	74	36	0
4867	109	28,7	2219	130	75	36	0
4868	183	28,9	2219	127	75	36	0
4869	150	28,4	2173	127	74	35	0
4870	111	28,5	2173	131	74	37	0
4871	127	27,4	2125	131	72	37	0
4872	100	27,4	2125	131	72	37	0
4873	130	26,8	2053	114	68	42	0
4874	150	27,9	2149	126	75	43	0
4875	165	27,9	2149	126	75	43	0
4876	129	27,9	2149	126	75	43	0
4877	138	30,3	2350	128	79	42	0
4878	109	31,9	2452	135	85	47	0
4879	193	33,4	2553	141	90	52	0
4880	145	33,1	2553	141	90	52	0
4881	152	37,7	2875	166	106	54	0
4882	199	37,7	2875	166	106	54	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4883	134	37,7	2875	166	106	54	0
4884	226	40,3	3090	171	109	59	0
4885	170	42,9	3304	176	112	64	0
4886	176	42,9	3304	176	112	64	0
4887	136	47,8	3705	208	125	64	0
4888	152	47,8	3705	208	125	64	0
4889	174	47,8	3705	208	125	64	0
4890	153	50,4	3928	214	132	64	0
4891	169	50,1	3928	214	132	56	0
4892	177	50,1	3928	214	132	56	0
4893	211	58,2	4431	257	154	64	0
4894	121	70,5	5488	307	172	73	0
4895	163	82,8	6545	357	190	81	0
4896	139	81,8	6545	357	190	81	0
4897	126	81,8	6545	357	190	81	0
4898	225	116,0	9472	451	238	95	0
4899	154	116,0	9472	451	238	95	0
4900	160	116,0	9472	451	238	95	0
4901	177	109,8	8971	428	221	90	0
4902	185	103,6	8470	405	204	86	0
4903	161	103,6	8470	405	204	86	0
4904	147	103,2	8504	377	198	92	0
4905	190	103,2	8504	377	198	92	0
4906	199	78,6	6514	295	153	73	0
4907	153	78,6	6514	295	153	73	0
4908	229	78,6	6514	295	153	73	0
4909	142	69,8	5777	262	143	64	0
4910	171	79,2	6503	302	165	74	0
4911	133	79,2	6503	302	165	74	0
4912	210	79,2	6503	302	165	74	0
4913	139	79,2	6503	302	165	74	0
4914	153	73,5	5996	290	157	73	0
4915	176	67,7	5490	279	148	71	0
4916	200	67,8	5490	279	148	71	0
4917	186	57,2	4628	234	126	58	0
4918	154	67,4	5478	282	150	61	0
4919	201	77,7	6328	331	174	65	0
4920	130	77,6	6328	331	174	65	0
4921	220	78,1	6328	331	174	65	0
4922	262	78,5	6328	331	174	65	0
4923	180	63,7	5031	273	138	64	6
4924	165	63,7	5031	273	138	64	6
4925	130	64,5	5178	274	141	58	3
4926	191	65,3	5324	274	144	51	0
4927	178	62,1	5057	269	136	46	0
4928	209	62,1	5057	269	136	46	0
4929	241	62,1	5057	269	136	46	0
4930	283	62,1	5057	269	136	46	0
4931	200	40,1	3246	174	91	25	0
4932	210	39,9	3246	174	91	25	0
4933	195	39,6	3246	174	91	25	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4934	200	39,4	3246	174	91	25	0
4935	210	13,1	1099	53	33	6	0
4936	192	13,1	1099	53	33	6	0
4937	165	13,1	1099	53	33	6	0
4938	246	13,1	1099	53	33	6	0
4939	196	27,3	2299	121	70	7	0
4940	170	44,6	3624	202	115	45	0
4941	182	44,6	3624	202	115	45	0
4942	184	53,1	4370	221	125	57	0
4943	179	53,1	4370	221	125	57	0
4944	172	56,2	4648	237	125	59	0
4945	195	56,2	4648	237	125	59	0
4946	139	63,0	5022	258	138	62	0
4947	125	65,2	5022	258	138	62	0
4948	100	66,0	5324	258	140	68	0
4949	148	80,6	6508	338	183	82	0
4950	131	80,9	6508	338	183	82	0
4951	100	67,9	5381	288	159	78	5
4952	127	67,9	5381	288	159	78	5
4953	160	67,9	5381	288	159	78	5
4954	157	59,6	4766	267	140	63	0
4955	130	59,8	4766	267	140	63	0
4956	130	54,4	4346	234	133	56	0
4957	136	54,4	4346	234	133	56	0
4958	123	50,8	4044	224	120	57	0
4959	133	50,8	4044	224	120	57	0
4960	127	51,2	4004	228	124	58	0
4961	149	51,2	4004	228	124	58	0
4962	135	51,2	4004	228	124	58	0
4963	152	47,2	3759	205	122	57	0
4964	115	48,1	3759	205	122	57	0
4965	114	46,2	3602	194	108	65	0
4966	139	46,2	3602	194	108	65	0
4967	141	45,4	3554	197	110	65	0
4968	134	45,4	3554	197	110	65	0
4969	142	45,6	3554	197	110	66	0
4970	146	45,2	3563	186	112	65	0
4971	149	45,6	3563	186	112	65	0
4972	143	46,2	3616	198	116	65	0
4973	161	46,2	3616	198	116	66	0
4974	142	48,2	3778	204	118	62	0
4975	130	48,2	3778	204	118	62	0
4976	150	48,2	3778	204	118	62	0
4977	149	49,1	3893	209	120	62	0
4978	152	49,2	3893	209	120	62	0
4979	159	50,5	4000	234	130	56	0
4980	134	50,5	4000	234	130	56	0
4981	135	53,3	4177	234	130	58	0
4982	142	53,0	4177	223	127	58	0
4983	116	53,5	4227	226	127	55	0
4984	116	52,6	4227	226	122	54	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
4985	117	52,7	4227	226	122	52	0
4986	117	50,9	4056	220	118	52	0
4987	110	50,9	4056	220	118	52	0
4988	119	49,9	4018	201	111	52	0
4989	129	50,3	4018	201	111	63	0
4990	122	48,2	3860	194	107	62	0
4991	99	48,6	3860	194	107	62	0
4992	137	45,8	3681	183	102	54	0
4993	141	45,8	3681	183	102	54	0
4994	157	47,0	3736	190	107	64	0
4995	136	47,0	3736	190	107	64	0
4996	132	54,2	4268	237	132	72	0
4997	152	54,2	4268	237	132	72	0
4998	116	60,9	4758	268	163	77	0
4999	110	60,9	4758	268	163	77	0
5000	117	67,6	5169	314	188	94	0
5001	127	67,6	5169	314	188	94	0
5002	152	77,7	5922	380	226	97	0
5003	147	77,6	5922	380	226	97	0
5004	140	103,9	7926	465	286	131	0
5005	143	103,9	7926	465	286	131	0
5006	163	103,9	7926	465	286	131	0
5007	151	104,0	7926	465	286	132	0
5008	120	95,8	7350	440	266	132	0
5009	126	97,5	7350	440	266	132	0
5010	114	81,8	6147	369	216	113	0
5011	127	98,0	7574	406	248	124	0
5012	131	92,9	7188	383	231	124	0
5013	118	101,2	7956	411	237	124	0
5014	112	99,5	7956	411	237	124	0
5015	113	105,3	8409	465	246	124	0
5016	108	105,1	8409	465	246	118	0
5017	109	105,1	8409	465	246	118	0
5018	116	106,6	8409	465	246	118	0
5019	113	91,0	7149	381	213	101	0
5020	116	85,3	6842	372	202	95	0
5021	116	85,3	6842	372	202	95	0
5022	145	104,0	8339	429	238	110	6
5023	107	62,9	5077	251	143	68	7
5024	122	63,2	5077	251	143	68	7
5025	149	78,1	6256	334	176	90	7
5026	186	78,1	6256	334	176	90	7
5027	164	78,5	6256	334	176	90	7
5028	150	92,4	7463	383	208	93	6
5029	146	93,9	7463	383	208	93	6
5030	141	88,2	6966	368	196	96	0
5031	117	88,2	6966	368	196	96	0
5032	149	88,2	6966	368	196	96	0
5033	130	45,0	3570	202	104	53	0
5034	141	45,0	3570	202	104	53	0
5035	122	16,3	1293	69	39	22	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5036	121	16,3	1293	69	39	22	0
5037	112	4,7	395	21	13	0	0
5038	151	4,7	395	21	13	0	0
5039	114	1,4	127	5	0	0	0
5040	125	1,4	127	5	0	0	0
5041	126	5,0	396	26	14	5	0
5042	107	13,9	1044	60	36	8	0
5043	98	16,4	1227	70	48	29	0
5044	112	16,4	1227	70	48	29	0
5045	122	16,4	1227	70	48	29	0
5046	168	15,5	1150	69	50	22	0
5047	196	15,5	1150	69	50	22	0
5048	107	15,5	1150	69	50	22	0
5049	209	14,7	1070	57	46	30	0
5050	206	14,7	1070	57	46	30	0
5051	144	14,7	1070	57	46	30	0
5052	152	13,7	1012	62	39	32	0
5053	138	13,8	1012	62	39	32	0
5054	181	13,8	1012	62	39	29	0
5055	157	12,3	888	52	37	28	0
5056	155	12,3	888	52	37	27	0
5057	182	10,5	760	46	33	26	0
5058	184	10,5	760	46	33	25	0
5059	183	9,9	712	44	31	24	0
5060	127	9,4	664	41	30	25	0
5061	220	9,4	664	41	30	25	0
5062	175	8,4	593	37	32	26	0
5063	183	8,4	593	37	32	26	0
5064	170	8,6	593	37	32	26	0
5065	139	8,8	610	44	28	27	0
5066	148	8,8	610	44	28	27	0
5067	139	9,1	651	45	29	27	0
5068	118	9,1	651	45	29	28	0
5069	137	9,3	651	45	29	27	0
5070	169	12,5	932	55	40	26	0
5071	163	19,6	1448	86	58	36	0
5072	92	19,6	1448	86	58	36	0
5073	148	19,7	1448	86	58	36	0
5074	180	23,5	1735	102	67	46	0
5075	206	23,5	1735	102	67	46	0
5076	176	24,5	1824	108	71	44	0
5077	137	25,6	1913	115	74	42	0
5078	198	25,6	1913	115	74	42	0
5079	192	26,2	1913	115	74	42	0
5080	177	26,6	1969	112	75	42	0
5081	240	26,6	1969	112	75	42	0
5082	131	26,6	1969	112	75	42	0
5083	199	28,6	2136	131	82	44	0
5084	171	28,6	2136	131	82	44	0
5085	149	34,9	2674	158	95	56	0
5086	188	34,9	2674	158	95	56	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5087	193	37,2	2674	158	95	56	0
5088	103	58,1	4432	238	143	74	0
5089	145	58,1	4432	238	143	74	0
5090	185	58,1	4432	238	143	74	0
5091	160	57,3	4426	240	142	78	0
5092	195	56,6	4422	242	142	81	0
5093	207	56,6	4422	242	142	81	0
5094	177	56,7	4422	242	142	81	0
5095	155	47,7	3681	206	120	77	0
5096	142	47,7	3681	206	120	77	0
5097	175	47,7	3681	206	120	77	0
5098	181	46,1	3596	182	114	72	0
5099	200	46,5	3596	182	114	72	0
5100	210	46,8	3596	182	114	72	0
5101	202	52,7	4098	206	126	79	0
5102	190	58,6	4600	230	137	87	0
5103	198	64,4	5101	254	148	94	0
5104	175	65,1	5101	254	148	94	0
5105	162	57,2	4475	223	130	81	0
5106	251	49,3	3849	193	112	69	0
5107	183	44,2	3447	179	102	60	0
5108	157	39,2	3045	165	92	51	0
5109	192	39,2	3045	165	92	51	0
5110	200	39,3	3045	165	92	51	0
5111	143	54,8	4371	227	129	68	0
5112	153	54,8	4371	227	129	68	0
5113	170	54,8	4371	227	129	68	0
5114	152	46,7	3742	195	110	57	0
5115	165	38,6	3112	162	90	47	0
5116	185	43,9	3554	182	109	47	0
5117	200	44,6	3554	182	109	47	0
5118	220	45,3	3554	182	109	47	0
5119	200	50,8	3992	209	118	58	0
5120	225	56,2	4429	235	127	68	0
5121	245	56,2	4429	235	127	68	0
5122	238	56,2	4429	235	127	68	0
5123	240	55,5	4378	223	126	76	0
5124	239	54,7	4328	211	126	83	0
5125	210	54,7	4328	211	126	83	0
5126	220	54,4	4310	214	127	80	0
5127	227	54,1	4292	216	128	77	0
5128	220	50,7	4025	200	123	65	0
5129	210	50,7	4025	200	123	65	0
5130	225	50,7	4025	200	123	65	0
5131	189	40,6	3182	161	100	63	0
5132	200	44,1	3449	190	110	63	0
5133	195	44,0	3449	190	110	62	0
5134	180	43,9	3449	190	110	60	0
5135	185	43,9	3449	190	110	60	0
5136	165	43,9	3449	190	110	60	0
5137	185	46,3	3449	190	110	60	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5138	175	43,0	3235	206	128	68	0
5139	170	43,0	3235	206	128	68	0
5140	190	43,0	3235	206	128	68	0
5141	198	38,2	2814	166	110	59	0
5142	197	38,2	2814	166	110	59	0
5143	183	38,2	2814	166	110	59	0
5144	177	32,1	2400	144	96	54	0
5145	173	32,1	2400	144	96	54	0
5146	169	32,5	2400	144	96	54	0
5147	167	29,1	2110	132	87	56	0
5148	145	29,1	2110	132	87	56	0
5149	134	29,2	2110	132	87	56	0
5150	134	26,8	1958	112	82	58	0
5151	154	26,8	1958	112	82	58	0
5152	135	26,2	1905	121	83	54	0
5153	120	26,1	1905	121	83	54	0
5154	110	26,8	1905	121	83	54	0
5155	125	27,5	1981	128	82	49	0
5156	120	29,6	2182	139	88	49	0
5157	127	31,8	2383	151	95	50	0
5158	135	31,8	2383	151	95	50	0
5159	162	32,1	2383	151	95	50	0
5160	156	36,2	2707	166	107	57	0
5161	167	36,2	2707	166	107	57	0
5162	153	39,2	2952	174	117	62	0
5163	188	39,2	2952	174	117	62	0
5164	155	39,2	2952	174	117	62	0
5165	177	39,3	2952	174	117	62	0
5166	189	43,1	3246	194	124	71	0
5167	195	44,6	3246	194	124	71	0
5168	200	47,0	3428	190	132	84	0
5169	195	47,4	3428	190	132	84	0
5170	189	51,7	3766	221	144	85	0
5171	150	51,7	3766	221	144	85	0
5172	110	48,9	3680	235	149	72	0
5173	99	47,0	3511	216	145	80	0
5174	95	47,0	3511	216	145	80	0
5175	120	47,3	3511	216	145	80	0
5176	173	43,3	3188	206	134	72	0
5177	131	43,3	3188	206	134	72	0
5178	153	40,3	2942	196	128	75	0
5179	140	40,3	2942	196	128	75	0
5180	179	32,2	2347	143	105	65	0
5181	163	32,2	2347	143	105	65	0
5182	158	33,0	2347	143	105	65	0
5183	216	26,9	1891	122	82	53	0
5184	202	26,9	1891	122	82	53	0
5185	196	27,1	1891	122	82	53	0
5186	115	32,6	2344	140	94	60	3
5187	131	38,0	2797	158	106	66	6
5188	210	46,6	3553	198	128	73	9

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5189	200	46,6	3553	198	128	73	9
5190	189	46,6	3553	198	128	73	9
5191	157	32,3	2473	131	89	54	0
5192	174	32,9	2486	134	90	56	0
5193	186	61,6	4836	276	160	77	0
5194	156	61,6	4836	276	160	77	0
5195	137	48,6	3824	214	124	58	0
5196	178	48,6	3824	214	124	58	0
5197	177	49,7	3824	214	124	58	0
5198	217	57,3	4424	245	142	73	0
5199	202	57,3	4424	245	142	73	0
5200	138	52,8	4174	228	138	59	0
5201	154	52,8	4174	228	138	59	0
5202	109	53,3	4174	228	138	59	0
5203	149	53,7	4192	232	131	72	0
5204	124	55,5	4192	232	131	72	0
5205	99	91,9	7157	394	214	108	5
5206	122	91,9	7157	394	214	108	5
5207	117	76,4	5875	331	180	86	6
5208	88	88,2	6910	380	198	98	0
5209	95	88,2	6910	380	198	98	0
5210	141	79,8	6406	371	181	82	0
5211	156	80,0	6406	371	181	82	0
5212	141	51,1	4098	220	121	56	7
5213	134	51,2	4098	220	121	56	6
5214	93	18,1	1433	77	40	25	0
5215	107	18,1	1433	77	40	25	0
5216	113	5,6	440	27	5	9	0
5217	131	5,6	440	27	5	9	0
5218	101	1,4	133	0	0	0	0
5219	89	1,3	133	0	0	0	0
5220	130	1,6	133	0	0	0	0
5221	145	10,1	799	45	22	13	0
5222	160	10,8	799	45	22	13	0
5223	188	11,4	799	45	22	13	0
5224	120	47,5	3802	191	104	46	0
5225	144	46,7	3766	206	101	44	0
5226	96	47,3	3782	210	105	49	0
5227	108	47,9	3798	215	109	54	0
5228	163	47,9	3798	215	109	54	0
5229	102	47,9	3798	215	109	54	0
5230	132	50,6	4000	236	122	55	0
5231	127	52,6	4203	236	122	55	0
5232	100	53,9	4198	242	122	45	0
5233	115	46,6	3439	210	122	70	5
5234	128	47,4	3597	225	132	76	0
5235	130	48,8	3597	225	132	76	0
5236	137	48,6	3574	218	130	82	0
5237	124	48,6	3574	218	130	82	0
5238	130	48,6	3574	218	130	82	0
5239	145	43,2	3235	209	122	74	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5240	124	43,5	3235	209	122	74	0
5241	103	37,1	2759	177	103	63	0
5242	141	33,0	2446	151	92	65	0
5243	110	33,0	2446	151	92	65	0
5244	111	30,6	2309	127	86	54	0
5245	110	30,6	2309	127	86	54	0
5246	108	28,2	2104	130	81	50	0
5247	120	28,2	2104	130	81	50	0
5248	130	26,3	1956	119	78	50	0
5249	145	24,4	1807	109	75	49	0
5250	117	24,8	1807	109	75	49	0
5251	120	21,6	1591	96	63	40	0
5252	150	21,6	1591	96	63	40	0
5253	133	20,6	1592	99	66	18	0
5254	144	20,6	1592	99	66	18	0
5255	123	22,9	1732	108	70	30	0
5256	111	22,9	1732	108	70	30	0
5257	122	23,1	1732	108	70	30	0
5258	126	24,2	1816	112	65	38	0
5259	127	24,2	1816	112	65	38	0
5260	166	31,0	2345	151	81	52	0
5261	117	31,0	2345	151	81	52	0
5262	113	37,1	2785	167	90	52	0
5263	130	37,2	2785	167	90	52	0
5264	136	41,6	3228	195	97	58	0
5265	128	41,6	3228	195	97	58	0
5266	118	44,5	3462	189	108	66	0
5267	119	44,5	3462	189	108	66	0
5268	106	44,5	3385	197	101	63	0
5269	118	44,5	3385	197	101	63	0
5270	126	41,2	3199	207	91	49	0
5271	119	41,2	3199	207	91	49	0
5272	109	38,0	3042	176	86	43	0
5273	101	38,6	3042	176	86	43	0
5274	119	48,8	3880	239	104	49	0
5275	158	49,5	3880	239	104	49	0
5276	107	59,3	4750	261	117	57	0
5277	118	59,3	4750	261	117	57	0
5278	120	60,1	4808	273	119	53	0
5279	98	42,7	3360	181	86	46	0
5280	101	42,9	3360	181	86	46	0
5281	125	43,1	3360	181	86	46	0
5282	116	68,5	5575	301	129	67	0
5283	141	64,6	5150	300	122	58	0
5284	120	64,6	5150	300	122	58	0
5285	126	64,6	5150	300	122	58	0
5286	148	41,2	3271	179	78	47	0
5287	133	40,4	3271	179	78	47	0
5288	118	40,8	3297	197	79	36	0
5289	162	41,1	3297	197	79	36	0
5290	151	26,1	2032	120	52	29	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5291	143	26,0	2032	120	52	29	0
5292	174	33,0	2577	158	66	38	0
5293	167	34,3	2712	160	68	38	0
5294	171	35,7	2846	162	71	38	0
5295	145	37,1	2981	164	74	38	0
5296	159	36,8	2981	164	74	33	0
5297	147	37,8	3038	167	74	42	0
5298	148	37,8	3038	167	72	42	0
5299	132	37,8	3038	167	72	42	0
5300	122	24,8	1987	105	47	28	0
5301	90	24,8	1987	105	47	28	0
5302	120	24,8	1987	105	47	28	0
5303	132	23,8	1985	104	42	25	0
5304	120	19,7	1585	105	42	22	0
5305	148	19,5	1575	100	41	23	0
5306	132	18,4	1457	102	40	24	0
5307	109	17,7	1400	100	39	23	0
5308	132	17,1	1350	95	39	24	0
5309	145	15,3	1200	85	37	21	0
5310	125	18,1	1455	89	35	14	0
5311	99	26,7	2118	130	52	23	0
5312	151	26,7	2118	130	52	23	0
5313	169	26,7	2118	130	52	23	0
5314	145	32,6	2625	154	68	23	0
5315	151	31,9	2625	154	68	9	0
5316	136	31,3	2591	151	65	9	0
5317	155	31,3	2591	151	65	9	0
5318	145	32,3	2591	151	65	30	0
5319	167	28,5	2276	138	56	30	0
5320	141	28,8	2276	138	56	30	0
5321	115	25,3	2076	117	50	14	0
5322	108	25,4	2076	123	51	14	0
5323	130	24,5	2040	123	51	8	0
5324	138	25,3	2042	123	52	24	0
5325	138	25,2	2042	116	52	24	0
5326	137	25,9	2042	123	52	26	0
5327	112	83,3	6630	363	163	78	8
5328	110	37,2	2901	167	84	48	0
5329	134	37,1	2901	167	84	48	0
5330	181	37,1	2901	167	84	48	0
5331	115	37,2	2910	164	83	46	0
5332	154	37,9	2934	175	87	50	0
5333	146	38,5	2957	185	90	54	0
5334	174	38,1	2957	185	90	54	0
5335	166	38,1	2957	185	90	54	0
5336	91	38,1	2975	166	86	51	0
5337	95	39,4	2998	183	89	52	0
5338	102	39,4	2998	183	89	52	0
5339	125	40,7	3113	186	94	52	0
5340	124	39,2	3113	186	94	44	0
5341	122	39,7	3113	186	94	44	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5342	96	39,4	3091	184	92	44	0
5343	136	39,6	3091	191	92	44	0
5344	128	38,1	2998	191	87	41	0
5345	135	39,1	2998	191	87	43	0
5346	163	37,4	2881	166	84	43	0
5347	137	37,4	2881	166	84	43	0
5348	138	37,0	2828	169	81	46	0
5349	140	37,0	2828	169	81	46	0
5350	155	37,0	2828	169	81	46	0
5351	142	33,2	2633	166	80	27	0
5352	165	33,8	2633	166	80	42	0
5353	154	30,7	2396	136	72	42	0
5354	121	30,7	2396	136	72	42	0
5355	123	30,8	2396	138	72	42	0
5356	139	29,1	2280	138	67	39	0
5357	165	29,9	2336	138	67	39	0
5358	125	29,7	2336	136	66	36	0
5359	127	29,5	2336	134	65	34	0
5360	165	31,8	2465	142	70	34	6
5361	152	31,6	2465	142	70	33	6
5362	119	34,3	2674	160	70	33	6
5363	125	33,2	2674	160	70	24	0
5364	146	34,2	2676	160	72	33	0
5365	134	34,1	2676	156	72	33	0
5366	158	34,1	2676	156	72	33	0
5367	163	32,3	2588	149	66	31	0
5368	191	32,8	2627	152	66	31	0
5369	200	33,3	2665	154	67	32	0
5370	145	33,3	2665	154	67	32	0
5371	133	36,2	2834	157	77	37	0
5372	116	36,2	2834	157	77	37	0
5373	142	36,2	2834	157	77	37	0
5374	154	36,4	2834	159	77	40	0
5375	164	35,6	2826	159	76	40	0
5376	190	35,6	2826	159	76	40	0
5377	162	56,1	4530	233	112	62	0
5378	194	62,5	5077	260	124	65	0
5379	172	69,0	5624	288	135	69	0
5380	105	68,9	5624	288	135	69	0
5381	138	69,0	5624	288	135	69	0
5382	134	63,8	5164	276	127	66	0
5383	152	58,6	4704	264	118	63	0
5384	132	49,6	3985	228	104	50	0
5385	151	40,7	3266	193	90	36	0
5386	201	49,5	3995	217	107	47	0
5387	125	49,5	3995	217	107	47	0
5388	162	49,5	3995	217	107	47	0
5389	143	76,8	6224	346	157	62	8
5390	162	76,8	6224	346	157	62	8
5391	116	77,0	6224	346	157	62	8
5392	150	70,8	5714	318	146	62	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5393	127	70,8	5714	318	146	62	6
5394	99	54,5	4348	230	120	56	6
5395	181	54,9	4348	230	120	56	8
5396	93	49,2	3864	209	106	56	8
5397	134	55,2	4356	234	117	59	8
5398	134	61,2	4848	259	128	61	8
5399	141	61,2	4848	259	128	61	8
5400	92	84,0	6756	352	169	79	8
5401	141	84,0	6756	352	169	79	4
5402	124	84,0	6756	352	169	79	0
5403	160	74,2	5895	332	155	70	0
5404	158	74,2	5895	332	155	70	0
5405	125	74,2	5895	332	155	70	0
5406	126	48,9	3942	205	106	51	0
5407	113	41,5	3285	187	92	51	0
5408	91	41,5	3285	187	92	51	0
5409	155	55,6	4470	264	120	50	0
5410	101	55,6	4470	264	120	50	0
5411	154	72,8	5854	318	153	74	6
5412	122	72,8	5854	318	153	74	6
5413	108	73,3	5854	318	153	74	6
5414	140	66,0	5258	292	142	68	0
5415	139	70,6	5614	322	152	71	0
5416	128	70,3	5614	322	152	71	0
5417	137	70,3	5614	322	152	71	0
5418	82	67,2	5371	297	147	71	0
5419	122	64,0	5129	272	141	70	0
5420	74	52,2	4180	219	116	60	0
5421	91	47,8	3850	210	101	43	0
5422	63	47,9	3850	210	101	43	0
5423	55	24,3	1842	110	63	44	0
5424	107	24,6	1842	110	63	44	0
5425	84	21,6	1669	95	60	32	0
5426	79	19,5	1465	89	55	38	0
5427	88	19,5	1465	89	55	38	0
5428	82	16,2	1277	70	47	18	0
5429	98	14,6	1115	66	42	24	0
5430	92	14,9	1115	66	42	24	0
5431	91	13,6	992	61	39	27	0
5432	95	14,0	992	61	39	27	0
5433	72	12,9	927	57	36	21	0
5434	95	11,6	866	53	31	18	0
5435	96	11,6	862	59	32	15	6
5436	70	12,2	862	59	32	19	6
5437	65	12,5	897	56	36	22	0
5438	67	12,5	909	56	34	23	0
5439	64	13,1	954	56	36	24	0
5440	77	13,1	954	56	36	24	0
5441	96	13,9	1027	62	40	25	0
5442	75	16,1	1198	75	42	30	0
5443	74	17,8	1345	80	50	32	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5444	75	20,9	1547	94	56	37	0
5445	53	23,1	1790	103	62	26	0
5446	41	25,7	1995	123	68	32	0
5447	79	27,3	2117	128	72	31	0
5448	74	27,6	2117	128	72	31	0
5449	82	27,7	2109	120	70	40	0
5450	77	27,6	2134	125	73	34	0
5451	82	27,7	2134	125	73	34	0
5452	70	28,7	2163	132	80	47	0
5453	77	29,2	2190	129	87	49	0
5454	70	29,2	2104	129	90	56	0
5455	71	28,7	2029	135	92	53	8
5456	77	28,9	2029	135	92	53	8
5457	84	25,5	1822	118	82	47	0
5458	87	22,2	1603	106	69	40	0
5459	79	22,3	1603	106	69	40	0
5460	80	22,6	1657	113	74	30	0
5461	63	22,6	1671	105	70	35	0
5462	63	22,7	1671	105	70	35	0
5463	84	26,0	1907	117	77	43	0
5464	72	34,5	2631	156	92	46	0
5465	81	26,4	2018	111	69	41	0
5466	79	26,7	2018	111	69	41	0
5467	79	25,0	1890	106	70	38	0
5468	85	20,8	1583	91	54	33	0
5469	78	21,0	1583	91	54	33	0
5470	70	19,3	1446	84	50	33	0
5471	76	21,7	1585	97	58	18	0
5472	67	26,2	1908	114	67	37	0
5473	62	28,3	2176	131	77	40	0
5474	72	28,7	2176	131	77	40	0
5475	85	31,3	2358	146	80	44	0
5476	81	32,8	2491	144	84	47	0
5477	96	32,9	2491	144	84	47	0
5478	94	35,5	2732	162	93	47	0
5479	103	40,4	3058	184	104	62	0
5480	122	40,4	3058	184	104	62	0
5481	101	40,4	3058	184	104	62	0
5482	107	43,5	3338	184	110	68	0
5483	84	43,7	3358	183	114	67	0
5484	82	46,4	3536	192	117	71	0
5485	74	38,8	2927	172	101	57	0
5486	102	38,8	2927	172	101	57	0
5487	110	36,8	2850	161	100	52	0
5488	105	38,0	2850	161	100	52	0
5489	102	39,1	2920	167	98	52	7
5490	111	39,6	2920	167	98	52	7
5491	108	52,7	4004	220	129	64	6
5492	97	67,2	5350	283	154	73	6
5493	96	68,4	5350	283	154	73	6
5494	92	62,5	4843	259	141	73	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5495	84	44,5	3513	175	109	55	8
5496	100	45,9	3513	175	109	55	8
5497	87	50,9	3910	198	117	67	8
5498	81	61,9	4880	263	144	76	6
5499	68	62,4	4880	263	144	76	6
5500	83	44,5	3478	181	104	53	0
5501	87	29,5	2224	125	71	40	0
5502	73	36,0	2798	159	86	38	0
5503	93	28,1	2137	126	68	33	0
5504	84	27,6	2149	120	67	36	0
5505	82	27,8	2149	120	67	36	0
5506	85	28,1	2212	124	69	26	0
5507	81	28,1	2212	124	69	26	0
5508	70	22,6	1733	91	56	29	0
5509	85	29,2	2246	126	70	40	0
5510	74	27,4	2150	118	66	30	0
5511	83	21,7	1677	101	54	26	0
5512	89	21,7	1677	101	54	26	0
5513	82	22,3	1677	92	56	28	0
5514	80	32,3	2473	142	78	44	0
5515	73	39,2	2960	173	99	53	4
5516	80	46,1	3447	203	121	63	7
5517	45	27,2	1924	110	75	50	6
5518	55	26,9	1924	110	75	50	6
5519	79	21,2	1510	83	63	47	6
5520	64	21,9	1510	83	63	47	6
5521	83	19,5	1374	78	56	39	0
5522	91	19,5	1374	78	56	39	0
5523	90	18,5	1336	74	53	40	0
5524	96	18,4	1346	70	52	37	0
5525	99	18,7	1346	70	52	37	0
5526	86	18,5	1323	73	50	39	0
5527	82	18,3	1351	75	54	34	0
5528	98	18,6	1351	75	54	34	0
5529	80	19,3	1396	84	53	38	0
5530	82	20,1	1455	86	57	41	0
5531	86	20,4	1455	86	57	41	0
5532	66	21,0	1531	91	60	31	0
5533	64	21,4	1567	83	58	39	0
5534	64	23,1	1691	95	62	43	0
5535	76	25,5	1865	100	69	50	0
5536	83	25,5	1865	100	69	50	0
5537	76	29,3	2096	115	79	47	6
5538	84	32,7	2367	138	83	52	6
5539	84	32,8	2367	138	83	52	6
5540	79	36,3	2636	158	98	61	7
5541	83	37,6	2816	163	101	43	6
5542	99	40,1	2943	177	105	54	7
5543	91	40,1	2943	177	105	54	7
5544	84	38,8	2906	175	100	54	7
5545	84	38,1	2906	175	100	54	7

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5546	73	35,0	2658	149	94	54	8
5547	83	35,3	2658	149	94	54	8
5548	84	31,9	2359	134	82	49	8
5549	58	32,4	2359	134	82	49	9
5550	98	31,2	2236	132	82	49	10
5551	83	30,4	2249	122	80	54	12
5552	95	30,9	2249	122	80	55	12
5553	71	31,5	2320	132	83	55	6
5554	85	32,2	2432	130	85	51	6
5555	65	34,8	2583	144	88	52	6
5556	82	37,8	2829	166	95	50	6
5557	81	37,8	2829	166	95	50	6
5558	121	41,2	3214	169	103	55	7
5559	129	42,7	3214	169	103	55	7
5560	96	46,2	3473	186	113	65	7
5561	89	48,6	3813	184	116	72	6
5562	102	49,6	3813	184	116	72	6
5563	88	53,5	4113	202	127	78	7
5564	101	54,0	4113	202	127	78	7
5565	113	54,3	4117	202	130	81	9
5566	118	54,3	4117	202	130	81	8
5567	87	50,0	3913	176	119	81	6
5568	101	50,9	3913	176	119	81	6
5569	133	49,8	3779	187	123	78	9
5570	93	49,8	3779	187	123	78	9
5571	94	51,4	3948	214	130	79	9
5572	105	51,4	3948	214	130	79	9
5573	110	54,0	4194	211	137	82	9
5574	128	54,3	4194	211	137	82	9
5575	109	64,9	5006	267	165	93	16
5576	97	90,4	7121	369	230	101	10
5577	111	90,4	7121	369	230	101	10
5578	107	94,1	7121	369	230	101	10
5579	114	116,4	8791	470	286	147	24
5580	118	116,5	8791	470	286	147	24
5581	81	92,2	6778	385	238	137	22
5582	86	92,2	6778	385	238	137	22
5583	101	80,1	6056	318	223	130	8
5584	104	90,0	6818	358	246	148	9
5585	90	99,9	7580	398	270	166	9
5586	100	138,5	10422	489	342	206	22
5587	86	138,5	10422	489	342	206	22
5588	111	141,0	10531	536	343	206	34
5589	100	140,5	10531	536	343	202	34
5590	88	139,9	10531	536	343	198	34
5591	89	80,6	6386	330	201	67	9
5592	97	82,5	6386	330	201	86	14
5593	93	84,4	6386	330	201	105	18
5594	75	95,8	7243	360	227	128	18
5595	82	112,5	8611	451	267	130	16
5596	88	112,4	8611	451	267	130	16

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5597	97	112,6	8611	451	267	130	20
5598	97	91,7	7203	366	219	110	20
5599	97	93,0	7203	366	219	110	20
5600	98	74,0	5682	293	176	96	8
5601	129	74,2	5682	293	176	96	14
5602	117	65,5	5132	279	160	75	14
5603	110	65,9	5132	279	160	81	14
5604	96	65,4	5122	262	160	81	12
5605	124	88,6	6804	348	202	105	21
5606	89	88,6	6804	348	202	105	21
5607	97	109,1	8484	443	241	128	15
5608	146	81,7	6301	304	180	103	13
5609	146	69,2	5365	258	158	91	13
5610	133	70,9	5459	283	165	85	16
5611	94	69,7	5459	283	165	84	16
5612	112	29,4	2087	101	58	40	9
5613	75	48,9	3495	198	130	84	12
5614	107	48,8	3495	198	130	84	12
5615	107	48,8	3495	198	130	84	14
5616	83	47,5	3361	192	127	78	18
5617	93	42,9	3047	163	110	75	15
5618	112	42,2	3016	160	111	78	14
5619	61	39,3	2927	150	106	76	6
5620	73	40,3	3031	162	106	75	7
5621	86	42,0	3031	162	106	75	7
5622	82	44,1	3198	164	114	78	8
5623	72	39,6	3034	178	108	45	9
5624	66	39,5	2820	146	102	74	15
5625	58	36,7	2745	150	100	61	14
5626	75	37,1	2745	150	100	61	15
5627	68	37,7	2787	159	99	61	16
5628	53	42,6	3054	162	104	72	14
5629	35	54,8	4095	206	134	77	15
5630	53	54,9	4095	206	134	77	16
5631	59	59,4	4604	236	146	81	16
5632	66	60,1	4667	223	144	90	15
5633	66	60,1	4667	223	144	90	15
5634	72	58,9	4475	216	139	93	8
5635	62	55,0	4149	202	132	83	8
5636	67	49,3	3696	181	119	73	8
5637	70	44,1	3309	178	110	71	9
5638	62	41,9	3176	166	107	62	9
5639	69	42,2	3176	166	107	62	8
5640	69	44,3	3267	173	110	64	8
5641	55	50,2	3713	202	124	76	10
5642	79	50,8	3783	208	126	83	6
5643	65	48,7	3716	190	126	85	6
5644	77	48,6	3716	190	126	85	5
5645	79	53,4	4072	190	139	94	15
5646	87	53,4	4072	189	139	94	15
5647	107	55,0	4072	189	139	94	15

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5648	95	50,2	3684	189	124	86	10
5649	80	42,2	3232	164	111	70	10
5650	70	45,0	3448	180	114	72	9
5651	73	46,9	3578	192	118	72	10
5652	70	46,6	3578	192	118	67	10
5653	72	44,6	3477	178	115	58	7
5654	72	41,8	3261	172	104	65	6
5655	83	43,4	3261	172	104	65	6
5656	85	39,9	2971	157	96	62	7
5657	90	39,0	2957	145	91	60	7
5658	81	39,6	2957	145	91	60	7
5659	101	53,8	4098	195	121	77	7
5660	84	63,7	4944	235	143	91	8
5661	91	73,4	5790	274	165	105	8
5662	82	79,0	6306	267	172	115	13
5663	100	78,7	6294	279	172	110	10
5664	96	78,5	6282	291	172	106	9
5665	107	78,6	6282	291	172	106	9
5666	101	81,1	6528	306	176	94	10
5667	101	83,6	6774	321	181	83	12
5668	101	79,5	6460	290	165	93	11
5669	97	81,5	6460	290	165	93	11
5670	86	72,4	5627	274	154	84	13
5671	101	65,6	5119	244	140	74	12
5672	70	65,7	5119	244	140	74	12
5673	89	64,8	5073	243	139	73	7
5674	73	58,9	4530	225	128	82	6
5675	119	1,0	100	0	0	0	0
5676	25	1,2	118	0	0	0	0
5677	36	1,6	160	0	0	0	0
5678	48	1,9	189	0	0	0	0
5679	42	2,3	234	0	0	0	0
5680	38	3,8	383	0	0	0	0
5681	51	3,8	383	0	0	0	0
5682	53	4,4	414	6	4	0	0
5683	77	4,7	429	10	8	0	0
5684	84	5,0	456	10	8	0	0
5685	80	5,0	456	10	8	0	0
5686	59	5,5	484	15	9	5	0
5687	77	5,4	462	19	8	6	0
5688	49	6,9	596	26	10	6	0
5689	28	6,9	603	22	11	6	0
5690	22	1,0	94	6	0	0	0
5691	50	0,9	90	0	0	0	0
5692	69	1,1	108	0	0	0	0
5693	91	1,3	129	0	0	0	0
5694	80	1,3	129	0	0	0	0
5695	78	2,1	190	10	0	0	0
5696	69	2,1	190	10	0	0	0
5697	90	2,0	189	7	0	0	0
5698	82	2,5	237	9	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5699	88	3,4	311	9	4	0	0
5700	89	3,3	311	6	4	0	0
5701	90	4,2	376	10	4	5	0
5702	61	5,1	446	20	4	5	0
5703	93	4,9	446	20	4	0	0
5704	87	6,0	544	18	10	0	0
5705	100	6,0	544	18	10	0	0
5706	96	6,6	591	25	10	0	0
5707	102	6,5	591	25	5	0	0
5708	113	6,8	622	25	5	0	0
5709	85	7,2	663	25	4	0	0
5710	120	7,6	704	25	4	0	0
5711	112	8,4	775	25	7	0	0
5712	105	8,4	775	24	7	0	0
5713	99	9,3	820	35	16	0	0
5714	99	10,7	949	35	16	5	0
5715	101	10,7	949	33	16	5	0
5716	73	12,1	1055	44	22	5	0
5717	105	12,1	1055	44	22	5	0
5718	126	12,0	1061	43	17	5	0
5719	112	12,0	1061	43	17	5	0
5720	123	12,4	1091	44	18	6	0
5721	119	12,4	1091	44	18	6	0
5722	98	12,5	1091	44	18	8	0
5723	105	11,0	948	40	18	8	0
5724	98	11,1	948	45	19	8	0
5725	84	11,2	965	46	21	5	0
5726	123	11,2	965	46	21	5	0
5727	119	11,2	965	46	21	5	0
5728	134	7,7	679	28	14	0	0
5729	91	7,7	679	28	14	0	0
5730	86	5,7	516	19	8	0	0
5731	100	7,5	671	30	10	0	0
5732	140	8,4	754	30	12	0	0
5733	111	8,4	754	29	12	0	0
5734	134	9,9	891	35	14	0	0
5735	76	14,8	1301	56	24	5	0
5736	77	14,8	1301	56	24	5	0
5737	74	16,2	1407	56	27	10	0
5738	108	5,9	480	22	15	7	0
5739	85	5,7	480	22	13	4	0
5740	123	5,5	451	28	6	9	0
5741	136	5,5	451	28	6	9	0
5742	106	5,5	451	28	6	9	0
5743	169	6,0	451	28	15	10	6
5744	145	5,9	449	19	15	10	6
5745	140	5,9	449	19	15	10	6
5746	101	4,9	409	18	11	5	0
5747	158	4,9	409	18	11	5	0
5748	165	6,9	540	31	20	6	0
5749	152	6,9	540	31	20	6	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5750	151	6,9	544	31	20	6	0
5751	169	16,5	1386	60	27	11	0
5752	100	21,1	1788	80	45	10	0
5753	162	21,1	1788	80	45	10	0
5754	152	21,4	1805	88	47	15	0
5755	114	21,4	1805	88	47	15	0
5756	124	21,8	1805	88	52	21	0
5757	124	22,2	1805	86	52	26	0
5758	109	21,9	1781	85	49	26	0
5759	122	21,9	1781	85	49	26	0
5760	158	21,8	1765	91	46	26	0
5761	133	21,8	1765	91	46	26	0
5762	189	21,8	1765	91	46	26	0
5763	164	21,5	1749	76	45	34	0
5764	172	21,5	1749	76	45	34	0
5765	178	21,5	1749	76	45	34	0
5766	148	21,1	1730	76	42	30	0
5767	120	20,8	1699	74	41	30	0
5768	116	19,9	1660	76	36	28	0
5769	138	19,9	1660	76	36	28	0
5770	72	33,7	2788	117	60	35	0
5771	164	31,0	2689	106	48	26	0
5772	130	31,0	2689	106	48	26	0
5773	130	30,2	2530	103	50	28	0
5774	191	30,2	2530	103	50	28	0
5775	183	30,2	2530	103	50	28	0
5776	172	30,2	2530	103	50	28	0
5777	150	25,9	2250	102	47	7	0
5778	152	25,9	2250	102	47	7	0
5779	200	23,1	1952	100	46	5	0
5780	179	23,1	1952	100	46	5	0
5781	144	23,1	1952	100	46	5	0
5782	143	23,6	1952	100	46	11	0
5783	123	19,7	1638	82	37	11	0
5784	149	19,7	1638	82	37	11	0
5785	144	19,7	1638	82	37	11	0
5786	143	16,0	1368	67	34	5	0
5787	143	16,0	1368	67	34	6	0
5788	115	12,9	1131	43	22	6	0
5789	145	12,9	1131	43	22	6	0
5790	142	11,4	971	40	24	8	0
5791	157	11,4	971	40	24	8	0
5792	168	11,4	971	40	24	8	0
5793	125	10,2	882	38	18	6	0
5794	153	10,2	882	38	18	6	0
5795	148	9,7	850	34	14	6	0
5796	206	9,7	850	34	14	6	0
5797	211	9,7	850	34	14	6	0
5798	154	10,2	877	36	14	10	0
5799	137	10,0	877	36	10	10	0
5800	166	10,5	883	41	20	10	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5801	106	10,3	883	41	20	5	0
5802	115	10,5	893	41	20	7	0
5803	82	10,4	893	39	20	7	0
5804	91	10,4	893	39	20	7	0
5805	148	10,4	886	39	20	7	0
5806	122	10,4	886	39	20	7	0
5807	77	10,1	867	39	20	6	0
5808	140	10,1	867	39	20	5	0
5809	125	9,6	840	30	17	5	0
5810	114	9,9	865	30	21	5	0
5811	119	9,9	865	30	21	5	0
5812	140	11,4	983	43	21	5	0
5813	138	11,0	983	43	8	4	0
5814	136	11,0	983	43	8	4	0
5815	134	14,4	1264	45	24	8	0
RIO BRAVO Fm.							
5816	124	14,4	1264	45	24	8	0
5817	128	19,7	1694	56	28	19	6
5818	146	19,7	1694	56	28	19	6
5819	149	26,2	2281	80	36	19	6
5820	95	26,2	2281	80	36	18	7
5821	112	32,4	2769	112	50	21	7
5822	139	32,4	2769	112	50	21	7
5823	154	32,4	2769	112	50	21	7
5824	154	36,7	3116	134	59	21	8
5825	110	36,6	3116	134	59	20	8
5826	103	40,5	3524	135	58	15	10
5827	76	50,9	4283	187	89	34	14
5828	121	59,9	4932	234	119	48	15
5829	152	68,9	5581	282	149	62	16
5830	148	68,9	5581	282	149	62	16
5831	156	69,0	5581	282	149	62	17
5832	155	88,5	6844	388	224	109	18
5833	137	88,5	6844	388	224	109	18
5834	132	91,6	7047	386	232	122	18
5835	151	94,7	7250	383	240	135	19
5836	172	94,7	7250	383	240	135	19
5837	169	91,1	6972	363	226	131	20
5838	198	87,4	6693	344	211	127	19
5839	175	87,3	6693	344	211	127	18
5840	166	87,0	6693	344	211	127	10
5841	172	72,3	5729	245	150	98	10
5842	118	72,3	5729	245	150	98	10
5843	131	62,5	4894	234	140	84	19
5844	119	62,5	4894	234	140	84	19
5845	92	54,9	4348	224	123	70	10
5846	93	52,5	4240	206	110	57	10
5847	64	52,4	4240	206	110	57	9
5848	76	52,4	4240	206	110	57	9
5849	94	54,5	4598	192	103	56	6
5850	99	55,0	4598	192	103	56	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5851	93	55,0	4598	192	103	56	6
5852	134	56,5	4734	198	96	58	7
5853	117	56,6	4734	198	96	58	7
5854	88	56,7	4734	198	96	58	7
5855	123	55,8	4664	183	93	54	14
5856	98	54,7	4545	183	93	54	14
5857	80	53,6	4425	183	93	54	14
5858	190	43,2	3512	164	85	41	14
5859	132	42,8	3512	164	85	41	15
5860	128	60,8	4893	234	140	62	16
5861	189	60,7	4893	234	140	62	16
5862	164	78,3	6168	305	182	112	17
5863	111	85,6	6843	305	186	113	16
5864	93	85,2	6843	289	186	113	15
5865	101	81,3	6556	267	165	118	14
5866	59	33,4	2569	126	76	50	10
5867	73	32,8	2569	125	76	45	10
5868	81	33,2	2569	125	78	54	10
5869	122	32,7	2542	121	78	54	8
5870	97	29,7	2382	116	65	44	7
5871	92	30,1	2382	116	65	44	7
5872	93	26,7	2108	92	61	42	6
5873	77	26,7	2108	92	61	42	6
5874	86	22,4	1826	76	48	33	6
5875	101	22,9	1826	76	48	33	6
5876	100	21,8	1715	76	48	32	6
5877	113	23,0	1808	76	48	40	6
5878	122	22,5	1808	76	42	40	6
5879	110	22,5	1808	76	42	40	6
5880	115	26,5	2077	100	54	39	7
5881	110	29,3	2292	106	69	42	7
5882	89	28,9	2292	106	69	42	7
5883	114	29,4	2292	106	72	45	7
5884	137	29,0	2252	106	72	45	7
5885	111	29,2	2252	108	72	45	7
5886	111	27,8	2139	108	65	45	7
5887	112	28,7	2193	108	65	55	6
5888	108	28,1	2193	90	65	55	6
5889	115	33,1	2603	122	72	55	6
5890	118	32,6	2603	122	72	50	6
5891	139	39,7	3137	122	80	65	9
5892	129	39,6	3137	121	80	65	9
5893	128	39,6	3137	121	80	65	9
5894	154	44,7	3508	142	95	80	9
5895	141	44,3	3508	142	95	80	6
5896	157	49,3	3723	210	128	88	6
5897	147	49,3	3723	210	128	88	5
5898	124	49,3	3723	210	128	88	5
5899	123	51,8	3893	205	130	102	9
5900	115	51,8	3893	205	130	102	9
5901	139	55,1	3998	221	148	111	9

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5902	96	55,0	3998	221	148	111	6
5903	98	56,0	4027	234	156	114	7
5904	115	56,3	4027	234	156	118	10
5905	114	55,0	4021	226	152	118	10
5906	133	55,0	4021	226	152	118	10
5907	144	55,7	4021	238	161	124	10
5908	143	54,3	3955	238	161	124	8
5909	148	54,3	3955	238	161	124	8
5910	197	54,9	3892	210	146	126	13
5911	195	54,9	3892	210	146	126	13
5912	203	54,9	3892	210	146	126	13
5913	131	51,9	3826	207	129	118	6
5914	151	51,9	3826	207	129	118	6
5915	138	51,9	3826	207	129	118	6
5916	137	53,0	3937	183	120	110	14
5917	137	53,0	3937	183	120	110	14
5918	132	54,5	4111	207	125	105	9
5919	151	54,5	4111	207	125	105	9
5920	133	56,1	4235	207	125	105	9
5921	143	54,1	4235	185	118	93	6
5922	121	55,3	4235	193	118	95	6
5923	108	55,3	4226	193	118	95	6
5924	119	55,4	4226	199	118	95	6
5925	122	52,7	4089	199	115	85	6
5926	140	52,8	4089	199	115	85	8
5927	134	50,3	3912	177	115	84	8
5928	153	50,3	3912	177	115	84	8
5929	142	49,1	3784	171	115	86	7
5930	150	48,0	3655	165	114	88	7
5931	152	48,1	3655	170	114	88	7
5932	133	44,6	3440	170	103	70	6
5933	149	44,6	3440	170	103	70	6
5934	159	44,1	3324	174	102	73	8
5935	143	44,1	3324	174	102	73	8
5936	149	44,1	3324	174	102	73	8
5937	126	42,6	3268	154	96	70	6
5938	133	43,3	3268	171	96	77	9
5939	129	42,7	3240	171	91	77	9
5940	149	43,3	3293	171	92	77	9
5941	140	41,5	3293	158	92	46	7
5942	140	42,5	3306	162	92	60	7
5943	144	43,6	3318	167	92	74	7
5944	128	43,6	3318	167	91	74	7
5945	139	45,7	3422	178	104	80	13
5946	162	45,1	3422	178	104	80	13
5947	127	53,2	4082	217	128	80	13
5948	135	56,1	4321	225	138	83	10
5949	148	59,0	4561	234	148	86	7
5950	128	62,5	4857	249	158	90	7
5951	157	66,0	5153	264	167	94	7
5952	120	65,9	5153	264	167	94	7

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
5953	156	76,9	5803	325	195	130	10
5954	159	76,9	5803	325	195	130	10
5955	157	79,8	6022	342	203	133	10
5956	209	82,6	6240	359	210	136	10
5957	155	82,3	6240	359	210	136	7
5958	156	85,9	6415	359	210	136	49
5959	161	85,8	6415	351	207	134	49
5960	121	85,7	6415	344	205	133	49
5961	85	14,5	1196	66	28	14	3
5962	100	24,7	1992	101	52	32	2
5963	120	35,1	2787	136	76	50	5
5964	110	45,4	3583	170	100	68	7
5965	58	55,6	4446	230	127	71	6
5966	85	66,3	5187	280	151	90	6
5967	120	66,3	5187	280	151	90	6
5968	91	66,3	5187	280	151	90	6
5969	149	72,9	5719	288	169	96	10
5970	134	72,9	5719	288	169	96	10
5971	134	74,7	5804	303	169	97	10
5972	156	74,4	5804	303	165	97	7
5973	152	74,4	5804	303	165	97	7
5974	130	71,7	5555	298	159	112	30
5975	116	71,7	5555	298	159	112	30
5976	114	65,2	5144	259	145	87	6
5977	115	65,2	5144	259	145	87	6
5978	131	60,0	4730	246	136	94	6
5979	125	60,0	4730	246	136	94	6
5980	127	60,4	4730	246	136	94	6
5981	107	60,9	4730	246	136	94	6
5982	115	55,9	4282	225	123	90	8
5983	105	52,4	3974	208	123	90	8
5984	94	52,7	3974	208	123	90	8
5985	102	49,7	3710	202	117	87	7
5986	109	49,7	3710	202	117	87	7
5987	103	46,9	3552	200	115	79	7
5988	116	47,4	3552	200	116	86	7
5989	117	45,4	3397	178	116	86	7
5990	125	43,7	3284	174	110	84	4
5991	133	42,1	3172	169	104	82	5
5992	110	42,1	3172	169	104	82	6
5993	122	40,1	2946	161	98	80	6
5994	130	40,1	2946	161	98	80	6
5995	118	40,3	2946	161	98	80	10
5996	133	37,6	2860	158	93	75	10
5997	116	39,6	2912	158	96	78	10
5998	141	39,4	2912	157	96	78	6
5999	118	40,6	3076	160	94	77	9
6000	125	40,6	3076	160	94	77	9
6001	96	42,2	3086	181	108	85	9
6002	91	41,9	3086	181	108	85	7
6003	121	42,1	3086	181	108	85	7

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6004	110	40,0	2952	159	99	82	7
6005	129	37,1	2681	150	99	80	7
6006	153	37,1	2681	150	99	80	7
6007	111	37,1	2681	150	99	80	7
6008	129	34,1	2515	132	89	74	6
6009	121	34,7	2498	135	94	80	11
6010	76	37,5	2744	151	94	80	11
6011	113	37,4	2744	151	94	79	11
6012	143	37,4	2744	151	94	79	11
6013	133	43,6	3179	168	117	96	10
6014	116	43,6	3179	168	117	96	10
6015	138	46,6	3392	188	121	106	10
6016	96	45,7	3392	188	121	106	6
6017	100	46,4	3383	185	115	102	7
6018	88	46,8	3383	185	115	109	9
6019	81	44,2	3312	170	104	109	9
6020	123	46,1	3312	177	104	109	9
6021	115	44,8	3299	177	102	97	5
6022	127	47,1	3495	177	103	97	6
6023	111	45,5	3495	175	103	84	6
6024	118	49,7	3766	200	114	95	6
6025	154	49,7	3766	200	114	95	6
6026	130	52,6	4009	217	122	95	6
6027	101	54,2	4093	218	127	97	6
6028	130	55,8	4178	218	133	98	6
6029	127	55,8	4178	218	133	98	6
6030	139	55,8	4178	218	133	98	6
6031	143	55,8	4203	225	135	99	6
6032	160	55,7	4228	231	137	99	5
6033	173	55,9	4228	234	137	99	6
6034	150	56,0	4228	238	137	99	6
6035	125	55,4	4199	238	131	94	6
6036	112	54,0	4181	220	130	93	6
6037	102	55,0	4181	221	130	93	6
6038	129	54,2	4138	221	124	91	6
6039	105	54,7	4182	221	124	91	6
6040	142	54,0	4182	218	122	91	6
6041	131	54,6	4182	218	122	96	8
6042	130	54,7	4169	222	124	96	10
6043	137	54,9	4156	227	127	96	13
6044	138	54,2	4112	227	127	91	13
6045	127	54,2	4112	227	127	91	13
6046	127	54,1	4144	213	132	85	15
6047	85	54,7	4173	220	132	85	15
6048	116	53,8	4173	220	128	81	6
6049	108	55,4	4255	220	138	88	8
6050	126	55,2	4255	216	138	88	8
6051	146	55,2	4255	216	138	88	8
6052	146	55,3	4244	214	134	88	5
6053	139	87,8	6874	342	181	125	15
6054	150	84,6	6626	329	175	121	14

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6055	185	81,5	6377	316	168	117	14
6056	150	78,3	6129	303	162	113	14
6057	120	75,1	5881	290	156	109	13
6058	127	72,0	5632	277	149	105	13
6059	127	68,9	5384	264	143	101	13
6060	85	65,6	5136	251	137	96	12
6061	116	62,5	4887	238	130	92	12
6062	108	59,3	4639	225	124	88	12
6063	126	56,2	4390	213	118	84	12
6064	146	53,0	4142	200	111	80	11
6065	146	49,9	3894	187	105	76	11
6066	139	46,8	3645	174	99	72	11
6067	150	43,9	3410	166	94	69	9
6068	127	41,0	3174	157	90	65	8
6069	127	38,1	2938	149	85	62	7
6070	85	35,3	2702	141	80	59	6
6071	75	35,3	2702	141	80	59	6
6072	85	35,8	2679	144	84	72	7
6073	92	35,8	2679	144	84	72	7
6074	131	34,2	2630	141	88	32	8
6075	160	34,2	2630	141	88	32	8
6076	217	34,2	2630	141	88	32	8
6077	172	35,8	2630	145	88	71	10
6078	169	34,9	2592	145	88	71	10
6079	201	34,9	2592	145	88	71	10
6080	163	35,9	2592	145	88	79	10
6081	174	35,0	2541	137	84	79	7
6082	177	35,0	2541	137	84	79	7
6083	146	35,1	2546	137	87	79	7
6084	208	33,9	2546	136	87	65	7
6085	205	33,9	2546	136	87	65	7
6086	156	34,2	2546	136	87	69	8
6087	113	34,2	2468	136	82	78	9
6088	113	40,1	2811	153	95	91	14
6089	115	38,4	2794	153	94	79	11
6090	106	38,4	2794	153	94	79	11
6091	123	40,2	2941	154	100	80	11
6092	109	39,6	2941	154	100	80	6
6093	109	42,3	3119	164	108	87	6
6094	115	47,8	3478	196	117	97	7
6095	116	47,3	3478	196	117	97	7
6096	113	55,9	4034	238	157	104	9
6097	104	64,4	4582	268	187	134	16
6098	110	67,2	4636	302	193	149	16
6099	133	66,9	4636	302	193	149	9
6100	121	67,2	4636	302	193	149	10
6101	134	59,4	4123	260	166	131	10
6102	134	45,7	3163	202	129	108	11
6103	124	46,5	3163	202	129	108	30
6104	136	33,6	2381	135	90	76	30
6105	104	29,6	2091	121	75	49	25

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6106	85	32,2	2326	128	82	53	20
6107	97	52,2	3867	230	124	95	8
6108	79	53,3	4009	230	124	95	8
6109	149	52,2	4009	214	121	90	8
6110	97	59,3	4425	251	133	93	24
6111	114	59,3	4425	251	133	93	24
6112	119	66,2	4896	295	162	106	17
6113	111	73,1	5368	339	192	120	10
6114	116	88,3	6262	394	264	161	21
6115	124	88,3	6262	394	264	161	21
6116	96	92,1	6455	422	277	188	38
6117	96	93,4	6455	422	277	188	38
6118	91	86,4	6054	366	258	165	24
6119	118	86,4	6054	366	258	165	24
6120	85	74,7	5367	318	208	144	21
6121	60	65,1	4716	286	168	124	19
6122	75	58,6	4301	243	141	108	19
6123	92	58,6	4301	243	141	108	19
6124	119	54,4	4222	234	126	96	7
6125	129	60,4	4500	263	139	105	8
6126	88	60,4	4500	263	139	105	8
6127	103	68,9	5060	294	175	121	15
6128	108	68,8	5060	294	175	121	15
6129	128	77,1	5661	326	195	136	16
6130	171	85,5	6262	358	216	150	18
6131	204	89,8	6550	370	240	150	25
6132	205	89,5	6550	370	240	143	25
6133	131	89,5	6550	370	240	143	25
6134	118	85,9	6313	371	220	148	13
6135	130	86,0	6313	371	220	148	15
6136	116	76,0	5549	331	195	129	15
6137	102	76,0	5549	331	195	129	15
6138	115	76,0	5549	331	195	129	15
6139	102	52,1	3826	217	127	104	17
6140	109	52,1	3826	217	127	104	17
6141	120	52,2	3826	217	127	104	18
6142	115	48,5	3600	200	118	97	18
6143	93	44,8	3373	183	108	91	18
6144	93	44,9	3362	202	106	91	17
6145	87	72,4	5269	348	208	132	22
6146	120	19,4	1550	68	41	20	14
6147	106	19,5	1550	68	41	20	15
6148	110	16,0	1214	57	33	32	13
6149	106	16,5	1214	57	33	32	13
6150	90	16,1	1156	58	35	35	10
6151	86	18,7	1380	68	43	40	14
6152	104	19,7	1380	68	43	40	14
6153	111	24,4	1696	90	59	59	10
6154	90	25,2	1699	93	62	66	18
6155	113	25,2	1699	93	62	66	18
6156	112	22,7	1639	86	57	48	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6157	76	23,0	1785	90	52	38	10
6158	126	23,0	1785	90	52	38	10
6159	146	23,9	1785	90	52	38	10
6160	72	24,8	1878	98	48	39	8
6161	134	25,2	1906	96	52	42	6
6162	74	25,4	1906	96	52	42	6
6163	145	36,5	2735	155	94	65	19
6164	123	38,6	2735	155	94	65	19
6165	85	45,0	3203	193	120	82	12
6166	73	39,3	2887	159	101	68	9
6167	148	39,3	2887	159	101	68	8
6168	75	34,7	2605	143	85	56	8
6169	82	33,7	2532	151	84	59	6
6170	80	37,7	2814	156	92	57	9
6171	73	37,8	2814	156	92	57	9
6172	79	36,4	2746	148	81	58	6
6173	74	32,1	2475	114	65	49	6
6174	53	29,0	2275	104	54	43	22
6175	62	27,9	2169	102	53	42	24
6176	80	25,7	1982	89	44	37	22
6177	74	23,1	1792	86	40	38	10
6178	96	23,2	1792	86	40	38	8
6179	88	22,2	1710	73	40	38	6
6180	85	21,9	1692	74	39	35	7
6181	92	22,0	1692	74	39	35	7
6182	67	23,0	1808	73	39	33	9
6183	69	22,1	1833	75	35	32	7
6184	62	22,1	1833	74	38	31	7
6185	102	22,2	1840	74	38	31	7
6186	103	22,8	1850	71	37	30	8
6187	83	22,8	1854	72	34	28	8
6188	106	22,6	1826	67	34	32	7
6189	97	22,9	1826	67	34	32	7
6190	134	24,3	1922	81	42	35	9
6191	118	24,6	1922	81	42	35	9
6192	127	25,3	1925	82	42	36	9
6193	115	37,8	2854	137	90	60	9
6194	79	47,9	3502	182	123	82	18
6195	92	47,9	3502	182	123	82	18
6196	75	47,9	3553	183	126	82	10
6197	96	42,6	3133	165	101	76	11
6198	96	42,6	3133	165	101	76	11
6199	103	36,1	2740	128	77	57	13
6200	64	36,1	2740	128	77	57	13
6201	47	30,4	2417	100	56	41	6
6202	45	30,0	2375	103	55	39	9
6203	32	28,8	2286	99	50	36	9
6204	56	27,1	2227	92	54	16	6
6205	45	27,0	2068	94	51	41	6
6206	77	24,1	1858	77	46	39	6
6207	53	22,1	1720	74	42	38	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6208	72	21,3	1666	74	39	37	7
6209	101	21,5	1666	74	39	35	7
6210	142	22,7	1781	81	41	33	19
6211	88	30,2	2416	127	68	29	7
6212	60	56,4	4111	270	164	58	10
6213	63	71,0	4950	320	224	121	15
6214	56	72,4	4950	320	224	154	21
6215	77	65,4	4496	294	186	134	21
6216	72	40,8	3048	194	115	74	7
6217	140	42,4	3048	194	123	74	7
6218	100	41,9	2984	183	123	83	7
6219	77	61,5	4443	307	205	83	11
6220	114	62,4	4443	307	205	135	11
6221	107	64,9	4443	307	205	135	18
6222	97	62,3	4341	275	189	127	16
6223	113	61,0	4239	269	181	127	14
6224	125	58,2	4136	262	172	126	12
6225	111	58,2	4136	262	172	126	12
6226	108	54,9	3920	249	149	105	18
6227	82	61,3	4536	272	172	124	14
6228	98	62,5	4536	272	172	124	14
6229	121	48,3	3420	222	139	100	12
6230	117	48,3	3420	222	139	100	12
6231	117	47,2	3420	222	139	100	12
6232	127	49,1	3540	223	155	92	8
6233	109	48,4	3540	223	155	92	8
6234	118	63,5	4486	290	194	124	15
6235	117	63,5	4486	290	194	124	15
6236	152	63,9	4486	290	194	124	15
6237	149	61,1	4443	307	205	135	18
6238	166	60,0	4536	272	172	124	14
6239	108	60,0	4536	272	172	124	14
6240	144	57,3	4239	269	181	127	14
6241	131	57,3	4239	269	181	127	14
6242	120	50,7	3849	206	118	72	13
6243	91	28,0	2227	96	54	44	6
6244	82	25,5	2068	94	51	41	6
6245	79	14,1	1098	56	30	30	6
6246	85	16,0	1255	60	33	30	6
6247	81	15,7	1255	60	33	20	6
6248	83	16,7	1255	60	33	20	6
6249	85	20,6	1479	74	45	49	6
6250	98	20,6	1511	71	44	48	6
6251	91	20,6	1511	71	44	48	6
6252	107	19,6	1496	68	40	48	7
6253	98	20,3	1496	68	40	48	7
6254	116	20,7	1596	70	40	38	7
6255	91	21,1	1596	70	40	38	7
6256	91	26,4	2018	89	57	43	8
6257	116	27,2	2018	89	57	43	8
6258	112	55,5	3990	252	168	112	28

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6259	102	59,8	4371	272	178	117	17
6260	85	60,9	4371	272	178	117	17
6261	85	49,4	3590	220	129	96	14
6262	106	49,5	3590	220	129	96	15
6263	59	42,8	3200	190	112	86	8
6264	103	40,9	3086	176	102	78	14
6265	94	41,9	3086	176	102	78	14
6266	79	42,6	3173	172	113	83	10
6267	78	43,4	3173	172	113	83	11
6268	88	43,3	3170	176	112	78	12
6269	97	43,4	3170	176	112	78	12
6270	112	45,0	3267	174	122	94	8
6271	126	45,2	3267	174	122	94	8
6272	96	45,5	3281	191	128	88	8
6273	99	46,3	3281	191	128	88	8
6274	92	58,1	4110	237	163	121	17
6275	86	70,6	5182	321	209	150	10
6276	92	73,0	5182	321	209	150	10
6277	99	63,0	4480	272	160	123	20
6278	88	55,8	4086	226	147	106	9
6279	98	62,3	4539	268	166	120	10
6280	106	62,1	4539	268	166	120	10
6281	76	66,1	4907	277	192	132	12
6282	105	69,1	4907	281	201	133	12
6283	71	69,1	4900	290	201	133	10
6284	42	74,2	5274	295	210	143	21
6285	33	70,1	4999	285	195	130	21
6286	94	65,9	4723	275	180	117	20
6287	72	51,7	3833	223	124	96	20
6288	59	40,9	3100	163	96	75	7
6289	66	36,3	2723	143	82	64	12
6290	59	35,4	2720	140	82	64	12
6291	57	34,4	2623	137	80	52	8
6292	83	32,5	2510	137	71	52	8
6293	118	32,5	2510	137	71	52	8
6294	168	32,5	2510	137	71	52	8
6295	181	32,5	2510	137	74	52	8
6296	189	32,2	2471	132	74	52	7
6297	150	31,9	2432	127	74	52	6
6298	123	31,8	2424	127	74	50	6
6299	144	31,8	2424	127	74	50	6
6300	119	38,9	3205	140	78	29	8
6301	109	89,0	6570	365	218	153	14
6302	40	89,0	6570	365	218	153	14
6303	31	57,9	4494	233	126	91	13
6304	47	45,3	3519	178	89	68	18
6305	47	39,7	3118	152	80	62	18
6306	104	43,7	3312	174	100	72	18
6307	116	43,5	3312	174	100	72	13
6308	102	52,2	3926	195	115	88	38
6309	140	51,6	3926	195	115	88	38

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6310	130	60,5	4375	238	148	102	38
6311	153	59,2	4375	238	148	102	7
6312	151	59,6	4375	238	148	102	17
6313	155	56,7	4211	233	143	97	17
6314	153	53,9	4048	229	139	92	17
6315	153	53,9	4048	229	139	92	17
6316	170	53,9	4048	229	139	92	17
6317	116	58,3	4647	223	117	81	18
6318	162	58,1	4647	223	112	80	18
6319	69	64,2	5197	242	126	87	10
6320	57	64,2	5197	242	126	87	10
6321	83	103,1	7493	446	268	193	12
6322	107	138,5	9802	593	392	271	24
6323	177	173,8	12111	740	515	349	37
6324	208	173,8	12111	740	515	349	37
6325	183	173,8	12111	740	515	349	37
6326	196	140,7	9721	610	421	274	37
6327	154	44,2	3147	192	148	92	10
6328	94	64,6	4667	263	170	124	17
6329	160	107,1	7768	455	279	204	27
6330	150	149,5	10869	647	388	283	37
6331	90	23,1	1635	101	64	43	10
6332	60	22,2	1037	192	148	92	10
6333	158	42,7	3147	192	148	92	10
6334	139	109,9	8547	434	242	161	30
6335	131	28,6	2012	115	75	56	15
6336	105	28,6	2012	115	75	56	15
6337	123	35,0	2486	145	95	64	16
6338	106	35,4	2486	145	95	64	18
6339	112	50,0	3630	199	136	96	18
6340	68	50,3	3630	199	136	96	19
6341	129	54,0	3901	213	142	95	18
6342	120	55,9	4162	202	131	90	19
6343	106	56,5	4162	202	131	90	21
6344	117	61,4	4394	225	148	117	36
6345	97	61,4	4394	225	148	117	36
6346	103	63,8	4756	256	155	128	30
6347	121	60,7	4601	237	139	115	30
6348	114	57,6	4446	219	123	102	28
6349	92	53,3	4028	208	112	81	29
6350	81	53,2	4028	208	112	81	28
6351	79	55,0	4232	218	110	76	25
6352	91	58,0	4566	218	121	83	28
6353	79	58,0	4566	218	121	83	27
6354	59	51,8	3968	193	110	74	26
6355	106	44,9	3430	161	90	67	25
6356	81	37,6	2990	148	72	57	10
6357	74	32,6	2626	123	62	49	7
6358	68	32,7	2626	123	62	49	7
6359	71	29,8	2353	114	50	48	16
6360	73	29,8	2353	114	50	48	16

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6361	68	27,9	2190	104	52	43	17
6362	39	25,5	2012	98	48	37	7
6363	25	24,7	1909	102	47	37	6
6364	64	23,4	1837	89	42	34	6
6365	69	22,0	1730	75	41	32	6
6366	38	21,0	1642	77	40	32	6
6367	42	20,2	1623	75	35	30	8
6368	48	21,1	1653	84	34	31	9
6369	54	21,0	1650	76	36	31	9
6370	79	20,2	1577	82	43	29	9
6371	83	19,3	1449	78	37	33	9
6372	51	20,4	1559	82	42	26	10
6373	66	22,1	1681	91	46	34	10
6374	68	22,2	1681	91	46	34	10
6375	72	23,0	1747	88	46	38	12
6376	74	23,0	1828	95	45	29	12
6377	79	25,6	1991	101	49	39	15
6378	110	25,6	1991	101	49	39	15
6379	96	27,0	2160	109	52	37	9
6380	94	27,0	2160	109	52	37	9
6381	77	29,0	2333	112	50	44	7
6382	92	32,5	2534	134	61	45	7
6383	80	49,7	4063	176	86	57	8
6384	95	91,9	7689	326	162	90	6
6385	55	124,0	9883	452	268	156	14
6386	63	148,1	10733	640	392	250	35
6387	46	143,6	10285	640	392	250	35
6388	61	143,6	10285	640	392	250	35
6389	75	116,8	8498	495	304	203	18
6390	63	90,7	6678	390	224	151	19
6391	41	62,9	4805	264	142	98	19
6392	78	63,4	4805	264	142	98	19
6393	84	55,7	4234	236	129	79	8
6394	75	49,8	3820	200	110	73	8
6395	74	44,6	3452	185	102	68	7
6396	85	45,4	3482	185	102	68	7
6397	71	47,5	3636	185	96	74	7
6398	77	47,5	3636	185	96	74	6
6399	56	45,1	3532	177	90	64	12
6400	54	41,8	3386	156	79	34	12
6401	54	39,7	3198	149	67	49	9
6402	62	36,8	3008	123	60	51	14
6403	55	35,7	2851	127	58	39	17
6404	44	35,0	2784	132	64	42	8
6405	44	33,1	2626	115	58	42	6
6406	52	21,0	1730	74	43	16	7
6407	117	21,0	1730	74	43	16	7
6408	40	26,8	2100	100	51	38	6
6409	49	26,8	2100	100	51	38	5
6410	63	21,6	1723	74	39	28	6
6411	86	19,8	1605	68	35	26	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6412	41	23,2	1895	81	39	32	5
6413	67	23,7	1900	83	38	33	8
6414	48	9,1	710	36	16	20	5
6415	106	20,4	1636	80	40	33	8
6416	67	21,8	1636	80	40	33	10
6417	146	56,2	4152	265	161	104	13
6418	151	56,2	4152	265	161	104	13
6419	144	125,5	8668	587	388	242	25
6420	136	125,5	8668	587	388	242	25
6421	130	151,2	10980	714	463	298	30
6422	119	151,2	10980	714	463	298	30
6423	148	151,2	10980	714	463	298	30
6424	145	123,9	9143	606	354	231	19
6425	129	103,1	7663	507	282	191	16
6426	157	103,1	7663	507	282	191	16
6427	144	87,3	6491	409	255	162	6
6428	77	42,0	1582	99	58	43	5
6429	39	13,5	983	54	32	32	4
6430	51	14,5	1052	61	34	22	5
6431	80	21,4	1563	91	47	44	8
6432	106	21,5	1563	91	47	44	8
6433	89	21,6	1563	91	47	44	8
6434	113	28,4	2024	123	74	46	6
6435	104	39,7	2842	182	103	76	9
6436	89	74,4	4852	351	236	177	20
6437	89	76,2	4852	351	236	177	20
6438	55	64,4	4752	305	183	125	12
6439	68	64,4	4752	305	183	125	12
6440	51	50,6	3702	227	144	90	11
6441	51	39,7	2896	168	108	65	8
6442	49	33,4	2502	133	85	58	6
6443	50	31,4	2352	132	78	51	12
6444	46	29,2	2157	123	71	50	12
6445	36	22,9	1717	97	54	40	6
6446	65	19,9	1549	77	45	21	6
6447	77	33,7	2414	151	97	74	15
6448	71	362,2	22731	1741	1334	892	116
6449	68	362,2	22731	1741	1334	892	116
6450	95	506,3	32235	2510	1769	1214	160
6451	85	506,3	32235	2510	1769	1214	160
6452	81	252,6	16557	1164	871	535	65
6453	71	135,3	8884	629	449	288	42
6454	60	88,5	5810	409	278	191	33
6455	98	58,8	4197	267	189	132	9
6456	76	58,8	4197	267	189	132	9
6457	88	54,2	3827	251	159	119	7
6458	86	64,6	4665	280	177	135	21
6459	96	66,4	4848	287	177	135	21
6460	65	77,4	5789	341	210	159	8
6461	65	77,4	5789	341	210	159	8
6462	115	94,9	6904	418	282	196	22

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6463	71	94,9	6904	418	282	196	27
6464	101	86,5	6021	373	246	170	27
6465	108	86,5	6021	373	246	170	27
6466	68	89,8	6314	389	265	163	23
6467	94	89,8	6314	389	265	161	23
6468	66	155,8	10586	727	490	316	46
6469	119	155,8	10586	727	490	316	46
6470	109	167,2	11270	801	518	347	48
6471	90	167,2	11270	801	518	347	48
6472	87	132,1	9549	629	408	270	24
6473	81	139,8	9780	653	408	271	34
6474	96	139,8	9780	653	395	271	34
6475	80	123,2	9155	563	342	235	29
6476	108	123,2	9155	563	342	235	29
6477	103	110,3	8149	520	316	210	22
6478	80	103,4	7587	501	287	195	35
6479	105	104,5	7649	501	316	196	35
6480	90	104,5	7649	480	316	196	20
6481	76	103,8	7264	474	305	185	24
6482	124	103,8	7264	474	305	185	24
6483	114	119,3	8189	538	370	229	21
6484	32	123,1	8558	565	376	234	22
6485	31	84,2	6238	379	245	156	14
6486	55	68,8	5025	303	189	124	12
6487	77	67,7	4917	303	177	124	10
6488	106	78,0	5544	355	236	147	20
6489	67	106,6	7613	476	319	222	18
6490	54	106,6	7613	476	319	222	18
6491	43	132,3	9145	593	413	248	29
6492	102	136,1	9356	631	417	260	39
6493	160	136,1	9356	631	417	260	39
6494	127	136,1	9356	631	417	260	39
6495	75	130,3	8959	564	410	253	24
6496	126	190,1	12824	849	620	387	48
6497	170	190,1	12824	849	620	387	48
6498	92	190,1	12824	849	620	387	48
6499	152	283,2	18919	1358	911	593	88
6500	170	283,2	18919	1358	911	593	88
6501	143	283,2	18919	1358	911	593	88
6502	106	251,3	17544	1287	840	541	70
6503	144	251,3	17544	1287	840	541	70
6504	104	251,3	17544	1287	840	541	70
6505	159	198,4	13495	924	600	404	57
6506	113	198,4	13495	924	600	404	57
6507	132	135,1	9684	662	415	286	30
6508	121	135,1	9684	662	415	286	38
6509	111	118,8	8313	563	364	245	35
6510	144	102,4	6943	464	313	203	31
6511	126	85,6	5816	399	252	170	25
6512	121	63,9	4385	281	199	131	25
6513	128	63,9	4385	281	199	131	25

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6514	131	16,1	976	69	56	48	6
6515	165	67,9	4720	322	205	144	28
6516	157	66,8	4720	322	205	144	28
6517	130	109,9	7698	488	306	219	28
6518	124	109,4	7698	488	306	219	17
6519	193	121,1	8653	550	327	231	17
6520	117	119,7	8653	550	327	231	25
6521	91	49,9	3451	225	134	100	15
6522	99	126,2	9326	544	298	215	25
6523	99	56,4	3987	270	166	143	11
6524	99	56,4	3987	270	166	143	11
6525	145	57,3	3987	270	166	143	31
6526	130	48,6	3281	213	157	133	31
6527	110	64,3	4563	292	188	165	19
6528	121	64,3	4563	292	188	165	19
6529	142	64,3	4563	292	188	165	19
6530	165	100,6	7171	425	276	195	39
6531	149	100,6	7171	425	276	195	39
6532	198	115,5	8021	494	314	222	39
6533	154	114,9	8021	494	314	222	26
6534	168	114,9	8021	494	314	222	26
6535	163	108,2	7751	494	294	203	11
6536	153	108,2	7751	494	294	203	11
6537	149	107,9	7735	450	298	213	25
6538	157	107,9	7735	450	298	213	25
6539	132	110,0	7824	452	298	247	25
6540	129	106,5	7824	452	288	247	20
6541	142	106,5	7824	452	288	247	20
6542	133	109,7	7824	452	288	247	44
6543	146	94,6	6931	371	218	189	44
6544	107	94,7	6931	371	218	189	44
6545	128	80,8	6051	349	202	168	13
6546	107	82,9	6051	349	202	168	13
6547	116	76,1	5696	299	164	148	6
6548	136	76,1	5696	299	164	148	6
6549	105	80,2	6154	340	191	131	27
6550	160	80,2	6154	340	191	131	27
6551	152	79,5	5955	325	178	136	12
6552	120	79,5	5955	325	178	136	12
6553	174	79,5	5955	325	178	136	12
6554	161	68,7	5314	260	144	107	18
6555	166	68,7	5314	260	144	107	18
6556	150	68,7	5314	260	144	107	18
6557	190	62,4	4900	260	137	97	8
6558	148	62,4	4900	260	137	97	8
6559	165	74,2	5720	302	182	131	6
6560	144	74,2	5720	302	182	131	6
6561	154	74,2	5720	302	182	131	6
6562	148	79,7	6049	338	201	132	11
6563	135	79,7	6049	338	201	132	11
6564	193	79,7	6049	338	201	132	11

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6565	146	70,4	5405	302	166	127	9
6566	155	70,4	5405	302	166	127	9
6567	168	65,9	5033	292	151	127	6
6568	146	65,9	5033	292	151	127	6
6569	106	63,4	4814	257	137	118	11
6570	99	63,4	4814	257	137	118	11
6571	93	59,9	4515	247	132	105	7
6572	60	54,9	4274	213	109	111	8
6573	117	54,9	4274	213	109	111	8
6574	150	56,6	4274	223	119	111	8
6575	106	56,2	4262	223	119	103	8
6576	136	62,0	4651	236	140	119	14
6577	109	61,7	4651	236	140	119	14
6578	106	64,2	4878	256	152	115	7
6579	134	64,2	4878	256	152	115	7
6580	127	64,2	4878	256	152	115	7
6581	137	61,0	4626	247	140	100	8
6582	81	61,3	4626	247	140	100	8
6583	87	57,3	4355	218	130	91	10
6584	92	51,1	3966	203	112	91	10
6585	91	51,9	3966	203	112	91	15
6586	62	50,3	3864	192	96	91	15
6587	89	49,9	3864	200	96	86	15
6588	51	50,5	3860	200	98	84	12
6589	75	48,2	3651	168	98	84	9
6590	54	45,1	3382	168	91	81	12
6591	41	40,9	3064	166	91	66	12
6592	56	36,7	2886	137	79	66	6
6593	84	36,4	2730	148	74	66	16
6594	44	35,2	2632	148	74	59	16
6595	72	36,3	2758	133	74	65	15
6596	112	35,9	2780	144	78	50	11
6597	197	35,9	2780	144	78	50	11
6598	200	36,1	2780	144	78	50	11
6599	109	35,8	2732	148	71	61	8
6600	113	36,1	2732	148	71	61	8
6601	160	39,4	3050	158	79	64	9
6602	78	41,3	3095	160	77	71	13
6603	116	41,3	3095	160	77	71	13
6604	77	41,4	3112	160	83	68	11
6605	53	41,4	3129	159	89	65	9
6606	96	41,8	3182	157	94	65	8
6607	198	42,1	3234	156	98	65	6
6608	180	31,7	2514	133	67	37	8
6609	192	31,7	2514	133	67	37	8
6610	109	34,1	2632	148	74	59	16
6611	84	35,2	2632	148	74	59	16
6612	84	32,0	2398	117	60	58	14
6613	110	36,8	2761	137	65	71	13
6614	92	35,3	2730	148	74	66	16
6615	78	35,3	2730	148	74	66	16

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6616	80	37,6	2730	148	74	66	16
6617	140	18,2	1418	69	45	19	7
6618	108	18,2	1418	69	45	19	7
6619	120	15,4	976	69	56	48	6
6620	83	35,0	2674	137	77	56	8
6621	54	33,9	2674	137	77	34	8
6622	59	36,1	2623	136	80	66	11
6623	59	36,2	2623	136	80	66	12
6624	104	23,3	1765	99	63	28	12
6625	96	31,5	2299	134	84	57	18
6626	65	69,0	4881	316	204	138	18
6627	78	68,7	4881	316	204	138	8
6628	78	58,5	4228	281	174	119	6
6629	133	58,5	4228	281	174	119	6
6630	108	38,5	2790	172	108	78	15
6631	144	38,5	2790	172	108	78	15
6632	129	38,8	2790	172	108	78	15
6633	112	27,0	1975	114	73	48	7
6634	123	33,4	2431	130	80	67	21
6635	164	32,6	2431	130	80	67	21
6636	112	32,9	2431	130	80	67	21
6637	116	30,9	2398	117	60	58	14
6638	86	30,4	2398	117	60	58	14
6639	80	30,4	2401	117	60	58	14
6640	96	30,5	2299	134	84	57	18
6641	86	30,5	2299	134	84	57	18
6642	76	30,5	2299	134	84	57	18
6643	88	30,4	2398	117	60	58	14
6644	72	30,5	2299	134	84	57	18
6645	80	30,4	2398	117	60	58	14
6646	89	32,4	2674	137	60	34	8
6647	97	33,7	2623	136	80	66	11
6648	91	33,7	2674	137	77	56	8
6649	105	32,9	2674	137	77	34	8
6650	166	33,7	2623	136	80	66	11
6651	183	33,7	2623	136	80	66	12
6652	140	0,0	0	0	0	0	0
6653	145	0,0	0	0	0	0	0
6654	140	0,0	0	0	0	0	0
6655	117	0,0	0	0	0	0	0
6656	101	0,0	0	0	0	0	0
6657	131	0,0	0	0	0	0	0
6658	135	0,5	36	9	0	0	0
6659	139	0,5	36	9	0	0	0
6660	114	0,2	15	0	0	0	0
6661	97	0,3	15	6	0	0	0
6662	111	0,2	11	6	0	0	0
6663	125	0,3	17	9	0	0	0
6664	116	0,3	17	9	0	0	0
6665	115	0,3	17	9	0	0	0
6666	111	0,7	14	6	0	0	0

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6667	95	12,2	967	43	23	6	9
6668	65	12,1	985	38	12	11	6
6669	98	12,1	985	38	12	11	6
6670	90	0,0	0	0	0	0	0
6671	103	0,6	62	0	0	0	0
6672	66	8,1	651	25	9	9	6
6673	63	20,5	1603	76	34	36	8
6674	59	19,2	1458	76	34	36	10
6675	97	16,0	1195	79	38	15	10
6676	93	15,4	1195	79	38	13	6
6677	111	15,4	1195	79	38	13	6
6678	102	28,9	2165	131	76	50	6
6679	80	29,3	2195	131	76	50	8
6680	86	28,4	2195	114	66	38	8
6681	71	22,3	1821	88	40	9	8
6682	63	20,4	1649	78	31	24	8
6683	87	21,2	1649	78	34	24	8
6684	78	19,6	1582	65	34	23	6
6685	120	21,9	1744	83	36	23	6
6686	94	28,4	2177	108	63	40	12
6687	62	28,4	2177	108	63	40	12
6688	62	24,6	1927	96	52	36	8
6689	87	25,1	1927	96	52	36	6
6690	80	20,7	1642	86	40	5	6
6691	93	22,0	1712	88	55	22	8
6692	91	22,5	1712	88	55	22	14
6693	81	14,0	1007	64	38	8	14
6694	92	19,0	1582	65	34	23	6
6695	103	20,5	1554	83	50	32	6
6696	90	18,4	1365	75	45	26	6
6697	109	18,9	1365	75	45	29	11
6698	68	20,2	1603	76	34	36	8
6699	120	20,5	1603	76	34	36	8
6700	70	15,1	1043	58	35	35	12
6701	64	27,6	2033	111	70	43	15
6702	71	33,7	2674	137	77	56	8
6703	92	33,6	2674	137	77	55	8
6704	76	34,1	2623	136	80	66	11
6705	95	41,6	3098	169	106	79	15
6706	90	41,5	3098	169	106	79	12
6707	114	41,3	3098	169	106	79	7
6708	130	65,2	4675	281	194	120	7
6709	120	65,3	4675	281	194	120	9
6710	109	65,3	4675	281	194	120	9
6711	95	65,8	4675	281	194	120	26
6712	100	24,9	1763	105	59	53	8
6713	138	24,9	1763	105	59	53	8
6714	127	25,7	1959	121	69	53	8
6715	110	25,7	1959	121	69	34	6
6716	88	24,6	1820	105	52	48	8
6717	87	31,4	2224	140	82	71	8

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6718	145	38,1	2628	175	112	94	8
6719	116	38,1	2628	175	112	94	7
6720	80	44,3	3098	207	120	88	13
6721	136	44,3	3267	207	120	88	13
6722	127	42,8	3267	204	116	55	8
6723	100	33,9	2523	129	82	63	0
6724	106	33,9	2523	129	82	63	8
6725	96	28,3	2085	108	68	45	8
6726	92	28,3	2085	121	68	45	9
6727	121	26,7	2028	121	66	40	9
6728	139	38,0	2893	152	93	68	9
6729	135	38,0	2893	152	93	68	7
6730	93	56,6	4215	245	144	103	10
6731	201	75,3	5538	338	196	137	14
6732	200	75,3	5538	338	196	137	14
6733	185	75,3	5538	338	196	137	14
6734	135	71,0	5339	336	191	128	11
6735	113	71,0	5339	336	191	128	16
6736	123	61,6	4689	272	149	112	16
6737	137	61,6	4689	272	149	112	16
6738	120	46,0	3555	200	114	73	8
6739	111	46,0	3555	200	114	73	12
6740	105	37,0	2806	153	79	60	12
6741	136	38,2	2987	153	86	65	12
6742	127	38,2	2987	151	86	65	12
6743	141	38,2	2987	150	86	65	12
6744	184	39,8	3093	157	86	70	12
6745	152	39,8	3093	157	85	70	6
6746	133	39,8	3093	157	85	70	6
6747	155	37,3	2943	142	78	55	0
6748	128	37,3	2943	142	78	55	0
6749	144	37,4	2943	152	79	77	9
6750	134	37,4	2788	152	79	77	9
6751	129	37,4	2788	152	79	77	9
6752	128	33,2	2577	141	78	52	7
6753	151	33,4	2602	141	78	52	7
6754	160	33,6	2628	141	78	52	7
6755	159	33,6	2628	138	78	40	7
6756	139	34,2	2628	138	78	40	7
6757	95	41,3	3119	168	96	69	8
6758	170	41,3	3119	168	96	69	8
6759	128	38,9	3010	167	76	59	8
6760	175	38,9	3010	167	76	59	8
6761	140	39,1	3010	167	76	59	8
6762	147	39,3	3010	167	76	59	8
6763	163	42,1	3329	150	83	65	10
6764	145	42,1	3329	150	83	65	10
6765	133	44,7	3651	182	82	36	10
6766	141	45,9	3651	182	82	36	10
6767	151	44,9	3504	170	94	49	9
6768	162	44,9	3504	170	94	49	9

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6769	158	44,9	3504	170	94	49	9
6770	144	38,4	3115	162	86	24	12
6771	139	39,2	3115	162	86	24	12
6772	142	40,3	3186	164	82	52	12
6773	126	40,3	3186	164	82	52	12
6774	148	48,3	3885	175	95	70	6
6775	131	48,3	3885	175	95	70	6
6776	139	51,1	4132	191	90	71	7
6777	80	54,0	4378	208	86	72	8
6778	75	49,3	3959	195	78	61	7
6779	138	49,7	3959	195	78	61	7
6780	144	48,1	3818	166	87	66	6
6781	75	42,7	3333	176	83	54	8
6782	126	40,4	3190	156	82	55	7
6783	185	39,9	3190	156	82	55	7
6784	157	39,9	3190	156	82	55	7
6785	171	40,3	3190	156	82	55	7
6786	175	40,6	3190	156	82	55	7
6787	145	34,4	2750	155	78	11	7
6788	149	34,4	2750	155	78	11	7
6789	188	43,3	3377	198	88	58	5
6790	175	43,3	3377	198	88	58	5
6791	164	41,9	3269	172	91	55	8
6792	210	41,8	3269	172	91	55	8
6793	170	42,0	3269	172	91	55	8
6794	119	42,1	3269	172	91	55	8
6795	205	43,0	3528	184	85	7	7
6796	187	43,0	3528	184	85	7	7
6797	135	43,1	3425	179	93	57	5
6798	129	43,1	3425	179	93	57	5
6799	136	43,2	3408	172	88	59	9
6800	203	43,1	3391	164	82	60	13
6801	119	43,3	3391	164	82	60	13
6802	113	41,4	3302	162	75	50	8
6803	117	44,8	3574	178	78	56	10
6804	100	44,8	3574	178	78	56	10
6805	125	39,3	3250	161	75	24	10
6806	116	39,3	3250	161	75	24	10
6807	112	42,4	3368	172	91	58	6
6808	100	44,1	3368	172	91	58	6
6809	105	45,9	3368	172	91	58	6
6810	111	18,6	1369	77	52	15	12
6811	105	18,7	1369	77	52	15	12
6812	108	28,5	2126	112	77	60	7
6813	102	29,3	2126	112	77	60	7
6814	127	27,9	2086	104	66	42	14
6815	143	27,9	2086	104	66	42	14
6816	113	28,4	2086	104	66	42	14
6817	117	27,0	2028	92	56	45	10
6818	107	40,5	2844	175	121	99	14
6819	91	44,8	2844	175	121	99	14

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6820	114	207,1	14132	1068	679	519	87
6821	113	207,1	14132	1068	679	519	87
6822	137	143,2	10496	681	397	291	43
6823	113	143,2	10496	681	397	291	43
6824	124	72,7	5402	330	181	120	8
6825	124	72,7	5402	330	181	120	8
6826	126	49,8	3806	236	132	68	10
6827	115	50,2	3806	236	132	68	10
6828	156	43,6	3286	198	111	64	15
6829	195	43,4	3286	198	111	64	15
6830	162	41,8	3151	188	113	69	11
6831	162	41,8	3151	188	113	69	11
6832	163	42,1	3151	188	113	69	11
6833	180	40,2	3028	179	101	67	8
6834	164	40,2	3028	179	101	67	8
6835	162	38,8	3071	179	109	32	6
6836	184	38,8	3071	179	109	32	6
6837	159	38,8	3071	179	109	32	6
6838	170	35,7	2711	150	83	54	10
6839	167	35,7	2711	150	83	54	10
6840	168	35,7	2711	150	83	54	10
6841	148	32,7	2553	141	76	37	6
6842	167	32,7	2553	141	76	37	6
6843	172	31,6	2535	148	70	23	6
6844	144	31,6	2535	148	70	23	6
6845	157	31,6	2535	148	70	23	6
6846	158	34,1	2698	125	68	53	8
6847	163	34,1	2698	125	68	53	8
6848	154	34,3	2698	125	68	53	8
6849	171	36,1	2866	146	72	45	10
6850	158	36,1	2866	146	72	45	10
6851	164	36,2	2866	146	72	45	10
6852	185	36,3	2866	146	72	45	10
6853	162	36,0	2860	146	72	47	8
6854	161	36,2	2860	146	72	47	8
6855	149	36,1	2865	142	76	42	8
6856	163	36,1	2865	142	76	42	8
6857	163	36,1	2865	142	76	42	8
6858	148	40,7	3250	182	89	51	9
6859	183	41,1	3250	182	89	51	9
6860	142	33,0	2610	138	65	46	7
6861	170	33,4	2610	138	65	46	7
6862	196	33,7	2610	138	65	46	7
6863	161	36,5	2836	142	73	52	8
6864	167	36,5	2836	142	73	52	8
6865	203	36,6	2836	142	73	52	8
6866	162	36,7	2836	142	73	52	8
6867	172	33,4	2682	122	60	45	10
6868	169	33,9	2682	122	60	45	10
6869	171	30,5	2428	120	59	46	7
6870	148	30,5	2428	120	59	46	7

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6871	113	30,5	2428	120	59	46	7
6872	180	30,3	2411	126	62	38	7
6873	156	30,5	2411	126	62	38	7
6874	165	30,8	2411	126	62	38	7
6875	144	30,9	2416	115	49	53	9
6876	155	31,0	2416	115	49	53	9
6877	172	28,9	2261	124	55	43	8
6878	144	28,9	2261	124	55	43	8
6879	157	28,9	2261	124	55	43	8
6880	151	28,4	2365	128	59	10	6
6881	167	28,6	2365	128	59	10	6
6882	176	28,9	2365	128	59	10	6
6883	133	28,3	2308	108	55	16	11
6884	157	28,3	2308	108	55	16	11
6885	131	34,7	2976	127	60	8	7
6886	123	34,7	2976	127	60	8	7
6887	146	38,1	3212	163	70	10	7
6888	104	38,1	3212	163	70	10	7
6889	129	39,6	3302	162	72	22	7
6890	166	41,2	3392	160	74	34	8
6891	182	41,4	3392	160	74	34	8
6892	148	39,9	3349	140	69	19	9
6893	127	40,1	3349	140	69	19	9
6894	121	40,5	3346	141	57	44	10
6895	175	40,5	3346	141	57	44	10
6896	131	37,9	3144	138	59	35	8
6897	128	37,9	3144	138	59	35	8
6898	94	36,1	2962	134	60	34	7
6899	98	33,5	2768	116	42	44	6
6900	176	23,4	1916	93	38	19	6
6901	66	23,3	1916	93	38	19	6
6902	96	32,3	2712	123	51	8	7
6903	119	31,2	2514	111	50	8	12
6904	141	23,1	1716	78	34	8	11
6905	86	33,2	2514	111	50	8	12
6906	83	19,2	1520	80	34	7	8
6907	165	19,2	1520	80	34	7	8
6908	151	19,2	1520	80	34	7	8
6909	175	20,9	1684	68	42	21	11
6910	180	21,3	1684	68	42	21	11
6911	227	32,1	2712	123	51	8	7
6912	171	32,1	2712	123	51	8	7
6913	174	32,1	2712	123	51	8	7
6914	141	40,9	3520	129	55	22	6
6915	168	40,9	3520	129	55	22	6
6916	183	40,9	3520	129	55	22	6
6917	151	44,2	3645	166	80	41	6
6918	174	44,2	3645	166	80	41	6
6919	157	44,2	3645	166	80	41	6
6920	122	44,2	3645	166	80	41	6
6921	146	67,4	5317	273	136	94	14

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6922	197	67,4	5317	273	136	94	14
6923	188	67,4	5317	273	136	94	14
6924	168	67,4	5317	273	136	94	14
6925	183	50,2	4034	216	105	51	12
6926	159	50,2	4034	216	105	51	12
6927	153	50,5	4034	216	105	51	12
6928	182	50,9	4034	216	105	51	12
6929	170	34,7	2769	143	64	44	6
6930	139	34,7	2769	143	64	44	6
6931	144	27,3	2150	101	46	38	8
6932	120	24,0	1952	85	50	9	7
6933	159	24,0	1952	85	50	9	7
6934	217	24,0	1952	85	50	9	7
6935	204	24,0	1952	85	50	9	7
6936	183	25,3	2016	91	48	28	8
6937	182	26,4	2079	96	46	41	9
6938	146	26,4	2079	96	46	41	9
6939	173	26,4	2079	96	46	41	9
6940	199	26,4	2079	96	46	41	9
6941	175	26,4	2079	96	46	41	9
6942	170	27,4	2175	100	46	41	8
6943	179	28,0	2271	104	42	33	7
6944	218	28,0	2271	104	42	33	7
6945	176	28,0	2271	104	42	33	7
6946	151	28,0	2271	104	42	33	7
6947	166	28,0	2271	104	42	33	7
6948	177	28,0	2271	104	42	33	7
6949	197	28,0	2271	104	42	33	7
6950	206	29,7	2468	113	51	27	11
6951	184	29,7	2468	113	51	27	11
6952	177	29,7	2468	113	51	27	11
6953	190	29,7	2468	113	51	27	11
6954	207	29,7	2468	113	51	27	11
6955	198	29,7	2468	113	51	27	11
6956	200	31,1	2573	120	52	24	10
6957	215	32,4	2678	127	53	22	9
6958	215	32,8	2678	127	53	22	9
6959	196	33,2	2678	127	53	22	9
6960	195	48,5	3862	184	88	66	8
6961	124	48,5	3862	184	88	66	8
6962	175	60,0	4434	206	101	70	10
6963	135	71,3	5007	227	114	74	10
6964	129	29,3	2275	116	65	44	9
6965	165	28,9	2216	117	67	41	8
6966	172	28,4	2157	119	69	38	7
6967	158	28,4	2157	119	69	38	7
6968	189	28,0	2159	109	65	37	8
6969	180	27,6	2161	100	62	36	8
6970	181	27,5	2161	100	62	36	7
6971	196	27,5	2161	100	62	36	7
6972	170	28,8	2305	119	55	43	7

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
6973	192	29,2	2305	119	55	43	6
6974	160	29,6	2305	119	55	43	6
6975	191	30,1	2433	125	52	19	7
6976	187	30,1	2433	125	52	19	7
6977	188	26,4	2144	100	43	25	11
6978	163	26,4	2144	100	43	25	11
6979	151	26,6	2144	100	43	25	11
6980	119	27,0	2163	99	47	35	7
6981	120	30,3	2464	108	56	33	8
6982	110	30,4	2464	108	56	33	8
6983	95	33,4	2834	121	56	11	6
6984	112	33,9	2834	121	56	11	6
6985	102	41,4	3526	132	60	16	10
6986	127	41,2	3526	132	60	16	10
6987	132	43,3	3686	144	53	26	6
6988	135	43,3	3686	144	53	26	6
6989	114	41,0	3459	129	57	38	8
6990	92	36,2	3047	118	46	35	7
6991	130	36,2	3047	118	46	35	7
6992	82	18,0	1494	66	29	9	9
6993	91	23,7	1952	85	50	9	7
6994	100	23,7	1952	85	50	9	7
6995	105	24,5	2016	91	48	10	8
6996	109	29,7	2514	111	50	12	8
6997	121	30,5	2433	125	52	19	7
6998	110	31,7	2514	111	50	10	9
6999	100	31,0	2410	132	82	20	10
7000	120	19,9	1377	75	58	53	8
7001	125	19,1	1377	75	58	37	8
7002	98	18,1	1377	75	46	21	8
7003	91	1955,2	2305	119	55	43	8
7004	100	1954,9	2305	119	55	43	6
7005	105	1954,9	2305	119	55	43	6
7006	109	1955,4	2433	125	52	19	7
7007	121	29,2	2433	125	52	19	7
7008	110	13,5	1049	56	25	20	7
7009	100	15,9	1230	62	31	20	7
7010	120	15,4	1230	62	31	13	7
7011	125	15,4	1230	62	31	13	7
7012	98	16,4	1277	62	31	21	7
7013	119	15,9	1277	59	28	21	7
7014	57	19,5	1531	78	31	21	8
7015	156	18,9	1531	78	31	10	8
7016	170	18,9	1531	78	31	12	8
7017	136	15,9	1259	55	29	19	8
7018	121	15,5	1259	55	29	10	6
7019	125	14,0	1167	49	27	12	6
7020	132	14,8	1167	49	27	19	6
7021	103	16,4	1360	51	22	10	9
7022	120	16,6	1360	51	22	12	9
7023	65	17,2	1380	65	28	13	8

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7024	60	16,9	1360	65	28	13	7
7025	45	14,8	1205	50	20	12	7
7026	52	14,8	1205	50	20	12	7
7027	103	18,2	1494	66	29	10	9
7028	97	18,2	1494	66	29	10	9
7029	146	14,7	1211	46	26	9	6
7030	94	14,8	1211	46	26	9	6
7031	87	14,2	1181	44	16	9	6
7032	105	14,8	1190	60	24	8	7
7033	109	14,8	1190	60	24	8	7
7034	111	13,3	1114	48	22	7	4
7035	132	12,2	1038	35	19	9	7
7036	140	12,6	1038	35	19	9	7
7037	134	13,0	1058	43	15	13	7
7038	164	13,1	1069	48	14	12	7
7039	123	13,0	1069	48	14	12	7
7040	164	15,0	1259	55	29	10	6
7041	122	14,0	1167	49	27	12	6
7042	187	14,2	1167	49	27	19	6
7043	92	15,8	1317	54	23	13	7
7044	122	23,0	1975	82	19	6	14
7045	106	23,0	1975	82	19	6	14
7046	124	23,9	2045	85	31	12	8
7047	102	23,9	2045	85	31	12	8
7048	97	24,8	2132	91	28	11	9
7049	128	24,8	2132	91	28	11	9
7050	129	25,0	2132	91	28	11	9
7051	131	24,5	2100	86	28	13	8
7052	112	25,4	2113	92	32	17	8
7053	124	25,4	2113	92	32	17	8
7054	131	25,4	2113	92	32	17	8
7055	146	20,1	1686	68	23	10	7
7056	107	18,3	1520	80	34	10	8
7057	126	18,3	1520	80	34	10	8
7058	116	20,1	1684	68	42	14	10
7059	132	20,0	1686	68	23	11	7
7060	108	18,3	1531	78	31	12	8
7061	103	15,4	1259	55	29	19	8
7062	139	14,9	1216	62	26	11	6
7063	121	18,2	1521	62	26	11	6
7064	130	18,4	1566	61	21	9	6
7065	155	18,7	1610	59	17	8	7
7066	126	18,6	1610	59	15	9	7
7067	133	19,3	1634	70	20	12	7
7068	96	19,3	1634	70	20	12	10
7069	123	15,5	1343	52	14	10	10
7070	95	16,4	1343	64	22	10	10
7071	119	16,2	1327	64	22	11	9
7072	116	16,7	1327	64	22	11	9
7073	103	24,5	2025	89	34	13	10
7074	96	22,2	1875	88	29	10	9

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7075	109	22,7	1875	88	29	10	9
7076	101	27,1	2240	91	30	29	10
7077	102	28,0	2286	96	33	29	12
7078	134	28,8	2333	101	36	29	14
7079	88	27,0	2218	97	34	15	14
7080	170	26,5	2218	97	32	12	10
7081	167	26,0	2218	97	31	10	7
7082	151	19,6	1669	68	19	9	7
7083	196	19,6	1669	68	19	9	7
7084	198	19,6	1669	68	19	9	7
7085	178	19,6	1669	68	19	9	7
7086	174	18,8	1654	57	15	10	5
7087	179	19,9	1732	65	18	10	7
7088	130	20,9	1811	73	20	10	8
7089	136	21,5	1848	84	20	9	8
7090	165	21,4	1848	84	20	8	7
7091	175	21,4	1848	84	20	8	7
7092	181	21,4	1848	84	20	8	7
7093	122	35,9	2232	110	37	18	9
7094	122	24,8	1530	79	35	26	7
7095	120	21,1	1530	79	35	26	7
7096	122	30,8	2271	140	74	42	9
7097	130	30,2	2271	140	74	42	9
7098	132	18,3	1400	82	42	20	6
7099	127	15,1	1148	62	28	23	7
7100	128	15,9	1252	73	32	6	9
7101	147	15,9	1252	73	32	6	9
7102	173	13,4	1055	58	23	14	6
7103	171	13,4	1055	58	23	14	6
7104	177	13,4	1055	58	23	14	6
7105	132	13,2	1037	50	20	20	6
7106	126	13,0	1037	50	20	20	6
7107	140	17,5	1458	80	22	11	11
7108	184	17,5	1458	80	22	11	11
7109	191	17,5	1458	80	22	11	11
7110	187	18,9	1486	86	35	11	10
7111	153	18,9	1486	86	35	11	10
7112	157	18,9	1486	86	35	11	10
7113	182	18,0	1521	81	23	10	9
7114	183	17,9	1521	81	23	10	6
7115	185	18,0	1521	81	23	10	7
7116	181	18,5	1521	81	23	11	9
7117	172	19,7	1631	85	27	11	9
7118	150	19,6	1631	85	27	11	6
7119	173	19,8	1631	85	27	11	6
7120	186	19,3	1642	79	24	10	6
7121	178	19,3	1642	79	24	10	6
7122	180	19,8	1632	87	26	10	6
7123	178	20,2	1632	87	26	14	11
7124	182	20,2	1632	87	26	14	11
7125	189	19,1	1598	67	24	14	11

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7126	147	19,3	1598	67	24	20	10
7127	121	20,5	1692	79	25	20	10
7128	140	20,5	1692	79	25	22	10
7129	96	38,2	2985	169	73	50	11
7130	65	47,3	3729	221	97	59	15
7131	61	48,3	3729	221	97	59	15
7132	56	41,0	3176	170	77	51	16
7133	43	28,0	2308	116	52	8	6
7134	86	35,1	2743	157	76	32	13
7135	115	35,4	2744	157	76	42	11
7136	143	35,7	2744	157	76	51	9
7137	185	35,3	2744	141	71	51	9
7138	167	37,6	2874	171	86	61	8
7139	167	37,6	2874	171	86	61	8
7140	154	37,6	2874	171	86	61	8
7141	177	82,9	6432	364	188	113	8
7142	161	82,9	6432	364	188	113	8
7143	138	107,3	8316	457	231	154	34
7144	120	106,0	8316	457	231	154	34
7145	98	72,6	5911	320	142	44	6
7146	89	73,7	5911	320	142	75	6
7147	140	55,2	4388	240	129	75	6
7148	142	55,5	4388	240	129	75	9
7149	166	55,9	4388	240	129	75	12
7150	173	54,2	4290	230	118	72	12
7151	156	52,4	4192	220	106	69	12
7152	157	52,6	4192	220	106	69	12
7153	145	52,9	4192	220	106	69	12
7154	143	51,4	4124	207	99	63	9
7155	138	49,8	4056	194	92	56	6
7156	190	49,9	4056	194	92	56	7
7157	157	47,2	3834	191	92	51	7
7158	157	44,6	3613	188	92	47	7
7159	137	44,8	3613	189	92	47	7
7160	168	45,0	3613	190	92	47	7
7161	178	42,3	3446	190	82	25	7
7162	179	45,6	3675	199	84	37	15
7163	187	48,9	3903	208	86	49	24
7164	165	48,5	3903	208	86	49	24
7165	158	48,9	3903	208	86	56	24
7166	167	49,3	3903	208	86	62	24
7167	146	45,4	3592	190	79	62	18
7168	132	41,5	3280	172	72	62	12
7169	145	36,1	2854	151	62	51	11
7170	155	30,6	2428	130	53	39	9
7171	145	30,7	2428	130	53	39	9
7172	148	30,7	2428	130	53	39	9
7173	195	27,5	2294	118	47	8	9
7174	170	29,7	2459	120	49	21	8
7175	177	32,0	2623	122	50	34	8
7176	155	34,3	2787	124	52	47	8

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7177	185	35,8	2873	136	57	48	10
7178	165	37,3	2959	148	62	49	12
7179	168	37,2	2959	148	62	49	12
7180	176	37,3	2962	151	62	49	12
7181	165	37,4	2964	154	62	49	12
7182	178	36,9	2964	154	60	41	9
7183	165	36,4	2964	154	59	34	6
7184	190	37,2	3002	154	59	34	7
7185	166	38,0	3039	154	59	34	8
7186	176	510,2	9020	597	307	193	17
7187	144	982,4	15001	1041	555	352	27
7188	45	111,8	7617	588	379	266	48
7189	164	99,3	6661	530	352	239	44
7190	101	88,7	5804	473	296	199	19
7191	64	72,4	4950	364	230	164	11
7192	67	68,6	4721	349	210	150	11
7193	64	60,5	4272	294	170	132	8
7194	69	49,1	3552	239	134	103	7
7195	61	45,8	3292	210	125	105	7
7196	81	40,7	2953	189	111	87	15
7197	59	33,2	2390	154	94	68	8
7198	81	27,9	1998	136	77	49	8
7199	38	22,3	1650	91	54	40	6
7200	27	18,3	1399	89	44	20	6
7201	66	16,4	1285	63	36	13	8
7202	91	15,8	1266	68	31	15	6
7203	55	17,1	1325	72	38	18	5
7204	70	16,9	1364	66	34	12	6
7205	67	17,2	1364	66	34	12	6
7206	49	16,1	1304	75	39	10	6
7207	65	16,6	1304	75	39	10	6
7208	67	16,6	1368	64	42	12	5
7209	73	18,6	1368	78	44	31	18
7210	73	18,8	1333	78	44	34	18
7211	68	17,4	1250	75	42	34	8
7212	65	11,4	914	37	24	11	6
7213	74	34,7	1818	128	120	171	36
7214	48	39,5	1818	128	120	171	36
7215	36	50,1	2190	154	199	270	52
7216	70	58,1	2308	202	285	350	58
7217	89	62,9	2308	202	285	350	58
7218	82	68,7	2459	223	331	417	64
7219	100	69,1	2459	223	331	417	64
7220	73	74,2	2756	264	392	465	74
7221	69	87,0	3092	271	420	517	106
7222	89	87,0	3092	271	420	517	106
7223	80	78,9	3276	305	423	541	104
7224	78	83,1	3533	321	430	569	108
7225	61	82,7	3562	310	405	566	119
7226	67	88,8	3467	306	379	541	95
7227	75	88,1	3446	326	375	514	99

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7228	55	88,1	3446	326	375	514	99
7229	67	68,1	3040	267	322	461	89
7230	106	72,1	2790	248	296	411	91
7231	56	65,7	2630	197	284	366	51
7232	61	59,4	2472	193	248	339	54
7233	54	54,8	2363	171	224	307	65
7234	48	49,5	2126	158	192	274	54
7235	64	47,4	2088	159	173	261	46
7236	55	41,4	2124	145	162	249	56
7237	53	40,6	2157	148	150	228	53
7238	70	41,4	2179	154	162	238	48
7239	59	39,4	2090	147	157	225	36
7240	34	43,3	2095	151	149	210	25
7241	80	48,2	2379	157	168	226	44
7242	83	48,4	2379	157	168	226	44
7243	88	49,3	2434	164	178	221	48
7244	69	39,3	2222	153	145	186	48
7245	67	36,2	2185	127	124	170	31
7246	88	34,9	2200	136	112	152	16
7247	80	38,9	2443	140	104	141	20
7248	59	34,0	2304	127	98	132	6
7249	56	32,4	2108	117	80	108	25
7250	45	29,1	1879	98	76	99	13
7251	33	27,3	1811	96	73	78	15
7252	75	27,3	1833	96	64	83	17
7253	67	27,8	1922	98	72	98	9
7254	56	27,1	1929	90	71	83	13
7255	104	27,1	1929	90	71	83	13
7256	104	29,9	2180	104	74	86	8
7257	41	35,5	2382	117	77	103	16
7258	48	35,6	2471	114	78	93	8
7259	55	33,2	2289	104	79	93	10
7260	120	31,5	2145	97	75	90	9
7261	41	31,6	2105	105	80	105	9
7262	90	28,4	1862	95	65	101	12
7263	68	30,1	1862	95	65	101	12
7264	65	30,4	1798	96	76	100	19
7265	89	33,2	2157	101	90	75	35
7266	60	31,7	1996	101	89	85	36
7267	83	29,4	1905	94	83	85	30
7268	75	26,7	1813	87	76	75	24
7269	83	27,6	1809	89	80	95	27
7270	88	26,7	1761	79	76	75	31
7271	88	25,5	1700	78	65	75	25
7272	33	21,2	1306	64	65	70	35
7273	69	26,8	1600	81	73	65	26
7274	70	23,4	1650	81	73	65	25
7275	70	24,0	1680	82	74	75	24
7276	79	24,9	1680	83	75	70	25
7277	93	23,7	1710	80	50	45	29
7278	87	23,0	1550	82	50	45	29

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7279	51	31,7	2037	100	96	78	59
7280	59	30,1	1884	93	90	78	67
7281	77	31,4	1710	79	78	70	43
7282	78	63,8	4228	255	151	129	43
7283	48	17,6	1152	63	46	45	21
7284	35	18,9	1306	65	50	48	10
7285	77	20,2	1320	65	50	48	28
7286	59	20,2	1320	57	41	46	28
7287	53	18,5	1220	52	38	43	21
7288	54	16,6	1170	52	37	32	13
7289	108	23,2	1540	66	49	54	43
7290	112	23,7	1675	70	46	52	44
7291	68	24,1	1716	70	46	52	44
7292	69	22,1	1738	65	38	35	12
7293	94	21,9	1738	64	33	35	11
7294	92	22,7	1759	64	34	35	24
7295	85	22,7	1778	63	37	34	24
7296	94	21,9	1778	61	37	34	12
7297	68	23,9	1892	64	36	46	13
7298	90	24,7	1965	67	38	46	13
7299	97	25,6	2039	70	40	46	14
7300	91	29,8	2142	74	40	44	21
7301	89	31,0	2230	74	40	50	23
7302	76	28,2	2230	68	38	50	23
7303	68	30,3	2230	70	38	50	31
7304	62	26,5	2101	60	36	42	31
7305	79	27,5	2101	71	36	42	31
7306	61	25,3	1936	71	35	36	25
7307	79	21,4	1728	60	31	36	16
7308	94	22,4	1728	60	31	38	16
7309	80	20,8	1582	50	28	38	19
7310	91	19,8	1582	50	28	34	19
7311	92	19,8	1582	50	28	34	20
7312	123	19,3	1545	50	27	30	20
7313	96	19,9	1550	50	32	41	20
7314	83	21,4	1622	54	35	42	17
7315	98	21,4	1622	54	35	42	17
7316	94	22,4	1687	58	35	42	21
7317	116	22,8	1780	66	36	42	21
7318	60	25,5	1905	66	36	46	20
7319	66	25,8	1905	66	37	46	21
7320	51	24,0	1887	66	37	40	21
7321	85	23,4	1876	56	32	40	10
7322	94	23,4	1876	56	32	40	10
7323	102	27,0	1864	64	37	39	28
7324	122	27,9	1912	70	40	45	28
7325	54	28,4	2075	70	40	45	27
7326	97	26,2	2075	68	38	52	12
7327	79	28,4	2056	68	38	52	20
7328	48	28,2	2056	65	37	50	20
7329	99	28,2	2126	69	34	47	26

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7330	104	28,4	2126	69	42	47	26
7331	83	27,2	2087	65	42	40	26
7332	79	24,8	1902	61	37	39	12
7333	102	24,8	1902	61	37	39	12
7334	93	26,9	1902	61	37	42	18
7335	102	25,3	1760	58	32	42	18
7336	123	25,7	1760	63	32	42	25
7337	116	21,5	1710	63	31	28	25
7338	79	20,5	1690	61	30	30	13
7339	122	22,6	1777	65	32	30	13
7340	114	22,3	1777	65	32	30	8
7341	91	22,3	1743	56	32	35	9
7342	50	23,1	1775	56	32	36	12
7343	103	28,5	2066	73	33	38	49
7344	113	27,3	2066	73	33	33	49
7345	120	26,2	2066	73	33	28	49
7346	86	21,5	1834	60	24	28	9
7347	95	24,9	1905	63	27	28	18
7348	104	24,9	1905	63	27	26	18
7349	112	26,4	2040	63	27	30	18
7350	103	23,6	2040	58	26	30	8
7351	101	24,5	2069	65	26	30	10
7352	81	25,1	2085	65	26	28	10
7353	134	26,0	2172	72	26	28	10
7354	110	27,0	2259	80	26	28	10
7355	75	27,6	2316	80	29	27	18
7356	90	27,3	2316	64	29	27	18
7357	110	27,5	2316	66	29	31	18
7358	93	27,7	2242	68	26	31	24
7359	98	24,7	1969	68	26	25	24
7360	100	24,7	1969	68	26	25	24
7361	116	24,8	1966	71	27	27	22
7362	64	26,5	2116	71	29	27	26
7363	109	26,2	2116	68	29	26	26
7364	91	24,7	2069	60	27	23	14
7365	94	24,7	2069	60	27	23	14
7366	104	21,9	1884	59	19	22	10
7367	100	19,2	1680	61	7	22	8
7368	83	20,6	1759	61	21	22	8
7369	93	20,3	1759	56	21	18	6
7370	106	26,2	2180	74	22	27	11
7371	112	27,0	2180	74	29	27	18
7372	98	22,6	1783	61	25	25	8
7373	89	22,5	1783	61	25	25	7
7374	120	24,6	1903	66	25	27	24
7375	81	23,4	1923	66	25	27	24
7376	84	52,0	4392	146	45	34	10
7377	43	12,2	911	47	17	8	8
7378	81	10,3	851	32	16	7	8
7379	79	10,8	851	32	16	7	8
7380	78	11,8	957	39	15	7	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7381	74	12,0	978	42	15	15	8
7382	65	13,3	1057	40	19	16	3
7383	74	15,0	1221	44	19	4	3
7384	77	15,3	1221	44	19	4	3
7385	53	15,8	1247	48	27	27	13
7386	42	11,4	907	37	19	16	12
7387	36	8,2	681	27	12	5	9
7388	35	8,3	654	28	9	5	11
7389	56	8,5	690	27	9	6	6
7390	56	9,2	746	33	6	7	11
7391	65	12,0	914	38	15	14	18
7392	57	13,5	1109	43	18	10	7
7393	34	16,2	1294	45	20	10	9
7394	86	15,3	1264	45	22	7	7
7395	70	15,3	1264	45	22	7	7
7396	59	14,5	1210	46	12	14	16
7397	90	14,9	1210	46	12	14	16
7398	80	14,2	1217	41	20	10	9
7399	50	14,2	1217	41	20	10	9
7400	67	15,1	1190	48	20	15	6
7401	84	14,6	1130	50	21	10	9
7402	83	14,8	1130	50	21	10	9
7403	84	13,0	1088	37	19	13	6
7404	95	14,1	1081	50	20	18	11
7405	102	14,6	1081	50	20	18	11
7406	75	13,7	1064	42	23	15	5
7407	107	13,1	1018	50	17	12	6
7408	91	13,1	1018	50	17	12	6
7409	88	12,0	950	46	19	16	6
7410	119	12,3	950	46	19	16	6
7411	117	12,2	955	44	20	9	18
7412	132	12,8	955	44	20	9	18
7413	117	11,9	935	34	20	7	11
7414	113	12,0	935	34	20	7	11
7415	105	12,5	911	39	15	12	26
7416	102	12,5	911	39	15	12	26
7417	117	11,7	991	45	17	6	7
7418	124	12,0	991	45	17	6	7
7419	142	13,2	1099	41	20	9	7
7420	140	13,2	1099	41	20	9	7
7421	108	13,6	1086	49	21	18	14
7422	137	14,3	1086	49	21	18	14
7423	110	15,2	1186	43	22	16	7
7424	66	18,1	1410	68	27	14	9
7425	68	17,6	1365	63	31	19	9
7426	45	18,2	1432	69	28	20	7
7427	71	19,2	1432	69	28	20	7
7428	75	24,9	1840	90	45	26	13
7429	73	34,8	2617	136	71	38	13
7430	89	42,9	3414	188	101	42	7
7431	69	45,7	3647	196	101	43	29

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7432	60	47,5	3647	196	101	43	29
7433	119	41,6	3374	186	81	30	16
7434	77	42,3	3374	186	81	30	16
7435	97	65,7	4944	307	169	61	30
7436	68	111,7	8261	569	340	129	45
7437	61	131,2	9859	639	400	150	42
7438	61	133,3	9505	630	410	162	42
7439	77	133,3	9505	630	410	162	42
7440	97	107,2	8032	529	321	120	42
7441	102	92,6	7033	463	265	98	30
7442	116	92,6	7033	463	265	98	30
7443	131	77,4	5828	380	201	73	20
7444	56	51,0	3870	241	117	46	10
7445	35	35,8	2711	148	80	33	11
7446	17	31,2	2528	134	60	24	12
7447	21	35,6	2887	147	54	20	20
7448	65	34,8	2868	135	57	24	6
7449	77	33,5	2776	140	59	25	7
7450	73	33,8	2776	140	59	25	7
7451	76	29,1	2308	113	52	11	14
7452	58	37,0	2905	152	73	32	7
7453	65	49,0	3848	216	107	45	7
7454	79	48,5	3812	199	102	41	17
7455	67	48,8	3889	205	94	35	17
7456	60	35,6	2890	152	69	24	18
7457	79	35,6	2890	152	69	24	19
7458	60	30,8	2452	129	50	20	20
7459	89	29,2	2331	126	54	20	10
7460	119	25,1	2026	98	41	18	10
7461	72	25,1	2026	98	41	18	10
7462	91	22,1	1830	96	37	10	6
7463	102	16,3	1317	61	30	14	9
7464	70	15,3	1244	67	20	9	6
7465	34	19,3	1630	76	29	16	6
7466	80	17,7	1488	70	26	14	8
7467	91	17,3	1480	75	25	6	5
7468	87	16,2	1380	74	25	6	5
7469	114	16,6	1390	74	26	6	10
7470	91	14,1	1300	26	12	3	5
7471	99	10,8	915	43	17	6	4
7472	98	14,0	978	61	33	13	4
7473	78	45,9	3525	221	120	43	7
7474	61	22,4	1756	90	49	20	10
7475	86	18,4	1349	81	45	22	13
7476	67	20,6	1554	86	46	25	6
7477	72	18,5	1409	79	41	21	4
7478	87	17,4	1380	65	36	11	5
7479	80	17,9	1380	65	36	11	5
7480	73	18,4	1428	74	36	11	6
7481	34	23,8	1823	91	51	29	8
7482	27	15,1	1216	59	24	11	13

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7483	46	14,3	1127	56	19	12	10
7484	50	13,7	1086	52	22	12	6
7485	77	13,4	1054	48	20	8	9
7486	86	14,5	1141	58	20	10	8
7487	84	14,5	1141	58	20	10	8
7488	79	16,8	1325	62	27	16	9
7489	77	18,4	1477	69	30	16	7
7490	79	18,5	1477	69	30	16	6
7491	75	19,9	1621	70	29	13	8
7492	75	20,9	1784	82	27	12	9
7493	74	21,0	1798	77	31	14	6
7494	63	21,7	1833	81	30	14	6
7495	81	22,2	1833	81	30	14	6
7496	84	21,7	1796	72	31	7	12
7497	71	22,2	1813	72	37	12	12
7498	71	20,7	1783	69	32	7	6
7499	50	20,6	1716	73	29	7	9
7500	58	21,0	1696	66	31	18	9
7501	64	21,1	1696	66	31	18	9
7502	72	19,8	1612	70	29	6	8
7503	88	18,8	1522	54	27	24	7
7504	70	17,8	1468	58	26	17	6
7505	79	16,4	1420	55	25	5	7
7506	71	16,4	1420	55	25	5	7
7507	52	17,1	1465	53	16	18	6
7508	49	17,5	1459	56	20	10	6
7509	44	16,1	1306	48	20	15	6
7510	51	16,1	1306	48	20	15	5
7511	58	16,9	1417	57	21	15	7
7512	64	15,7	1221	59	30	17	6
7513	54	15,4	1240	51	20	14	6
7514	49	15,6	1290	52	23	11	5
7515	60	15,3	1251	52	16	17	5
7516	55	14,2	1218	49	9	12	6
7517	106	14,5	1218	49	9	12	6
7518	81	14,9	1235	48	22	11	8
7519	60	15,4	1274	55	19	15	6
7520	94	15,4	1274	55	19	15	4
7521	108	16,8	1383	54	20	14	4
7522	100	17,6	1441	60	23	15	4
7523	60	17,5	1473	64	22	9	5
7524	77	17,5	1473	64	22	9	5
7525	71	17,8	1536	56	22	5	5
7526	97	17,8	1536	56	22	5	5
7527	109	17,5	1514	57	20	9	6
7528	115	17,5	1478	60	19	9	4
7529	106	17,5	1478	60	19	9	4
7530	90	16,2	1395	44	20	10	4
7531	83	16,4	1395	44	20	10	4
7532	75	17,1	1420	58	23	6	6
7533	45	16,1	1362	54	23	6	10

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7534	36	13,3	1132	43	18	7	5
7535	46	12,1	1023	41	15	5	5
7536	51	16,7	1407	56	20	10	7
7537	36	16,8	1384	54	20	10	7
7538	50	15,8	1305	50	18	10	4
7539	83	14,9	1225	45	16	9	4
7540	67	13,7	1118	46	18	7	7
7541	94	13,7	1118	46	18	7	7
7542	137	13,7	1118	46	18	7	7
7543	124	16,3	1377	55	22	12	7
7544	136	18,3	1595	62	24	11	5
7545	139	18,3	1595	62	24	11	5
7546	138	18,7	1595	62	24	12	5
7547	131	19,6	1672	61	27	12	5
7548	116	12,4	1055	34	18	10	5
7549	101	16,1	1377	55	22	12	7
7550	153	18,4	1595	62	24	12	5
7551	87	18,4	1595	62	24	12	5
7552	126	18,4	1595	62	24	12	5
7553	97	16,1	1377	55	22	11	7
7554	140	16,1	1377	55	22	11	7
7555	158	16,1	1377	55	22	11	7
7556	131	18,4	1595	62	24	12	5
7557	185	18,3	1595	62	24	12	4
7558	117	18,3	1595	62	24	12	4
7559	146	19,2	1672	61	27	12	5
7560	102	12,1	1055	34	18	6	5
7561	161	12,2	1057	43	14	6	6
7562	185	14,1	1152	43	14	7	6
7563	118	13,1	1152	43	13	7	5
7564	158	12,9	1066	45	14	6	4
7565	116	12,4	1018	45	14	8	7
7566	109	15,7	1210	59	26	12	8
7567	140	12,8	1001	53	20	10	7
7568	120	8,9	698	32	10	6	5
7569	73	8,9	698	32	10	6	5
7570	147	8,0	691	27	12	4	3
7571	167	8,0	691	27	12	4	3
7572	162	8,0	691	27	12	4	3
7573	159	5,3	449	13	10	4	3
7574	168	5,3	449	13	10	4	3
7575	142	5,5	389	21	12	8	7
7576	205	5,5	389	21	12	8	7
7577	165	5,5	389	21	12	8	7
7578	181	5,5	389	21	12	8	7
7579	156	5,6	475	11	9	6	5
7580	171	5,6	475	11	9	6	5
7581	135	5,9	529	18	5	3	2
7582	85	5,9	529	18	5	3	2
7583	99	7,6	678	27	5	4	2
7584	109	7,6	678	27	5	4	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7585	161	11,2	965	34	18	6	5
7586	116	11,2	965	34	18	6	5
7587	181	11,8	965	34	18	6	5
7588	144	15,0	1227	43	21	11	9
7589	145	15,0	1227	43	21	11	9
7590	135	15,0	1227	43	21	11	9
7591	164	14,9	1242	53	26	12	8
7592	188	14,9	1242	53	26	12	8
7593	160	12,8	1118	40	18	6	5
7594	166	12,8	1118	40	18	6	5
7595	203	13,0	1118	40	18	6	5
7596	180	13,2	1141	45	14	6	4
7597	154	13,2	1141	45	14	6	4
7598	157	13,9	1141	45	14	8	7
7599	162	12,8	1094	31	12	5	7
7600	149	12,8	1094	31	12	5	7
7601	163	13,1	1105	42	7	4	9
7602	97	13,5	1141	45	14	6	4
7603	177	13,7	1141	45	14	8	7
7604	155	13,3	1176	37	12	8	6
7605	118	13,3	1176	41	9	8	6
7606	155	13,0	1144	41	9	8	6
7607	124	12,8	1144	41	9	6	4
7608	151	11,7	1038	24	10	8	7
7609	170	11,7	1038	24	10	8	7
7610	176	11,7	1038	24	10	8	7
7611	148	11,7	1023	25	11	9	6
7612	170	11,7	1023	25	11	9	6
7613	169	11,7	1023	25	11	9	6
7614	94	13,2	1163	39	13	6	4
7615	160	13,1	1163	39	13	6	4
7616	165	14,1	1238	42	12	8	7
7617	175	13,9	1238	42	12	5	7
7618	129	13,9	1238	42	12	5	7
7619	186	14,2	1259	39	14	7	6
7620	161	14,1	1259	39	14	6	4
7621	153	14,6	1259	39	14	8	7
7622	142	15,7	1360	47	14	8	6
7623	173	16,2	1360	47	14	9	7
7624	68	14,8	1244	35	15	12	10
7625	174	14,8	1244	35	15	12	10
7626	169	14,8	1244	35	15	12	10
7627	89	14,0	1166	38	16	7	8
7628	154	14,0	1170	35	18	7	6
7629	147	14,0	1170	35	20	7	5
7630	139	16,1	1365	47	20	8	3
7631	139	16,1	1365	47	20	8	3
7632	141	17,3	1543	43	16	4	1
7633	134	17,1	1543	43	16	4	1
7634	136	15,9	1388	48	18	7	6
7635	128	15,9	1388	48	18	7	6

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7636	128	14,5	1260	44	13	6	3
7637	127	14,5	1260	44	13	6	3
7638	107	15,9	1423	52	16	5	2
7639	105	20,3	1782	60	24	8	3
7640	125	20,3	1782	60	24	8	3
7641	110	20,4	1782	60	24	8	3
7642	174	20,5	1782	60	24	8	3
7643	135	19,6	1703	56	20	8	2
7644	94	15,6	1324	50	15	7	5
7645	102	15,6	1324	50	15	7	5
7646	76	14,0	1177	43	15	7	5
7647	119	13,9	1177	43	15	7	2
7648	107	16,5	1408	52	20	7	2
7649	136	17,5	1534	47	17	8	3
7650	126	17,5	1534	47	17	8	3
7651	113	17,6	1534	47	17	8	3
7652	132	13,9	1191	39	17	8	1
7653	110	12,4	1114	34	15	1	1
7654	82	12,3	1054	33	15	7	5
7655	108	15,0	1338	41	17	1	1
7656	81	15,0	1338	41	17	1	1
7657	152	6,4	529	7	10	7	4
7658	91	6,7	529	7	10	7	4
7659	85	2,0	134	9	2	2	1
7660	103	10,3	894	30	12	5	2
7661	186	10,1	894	30	12	5	2
7662	104	12,4	1060	37	14	3	1
7663	58	14,8	1227	44	15	3	1
7664	49	9,1	687	32	10	7	5
7665	80	8,2	585	28	16	11	9
7666	142	8,2	585	28	16	11	9
7667	192	7,3	620	22	11	4	1
7668	220	7,3	620	22	11	4	1
7669	198	7,3	620	22	11	4	1
7670	164	7,6	641	30	10	4	2
7671	229	7,5	641	30	10	4	2
7672	190	7,5	641	30	10	4	2
7673	179	8,0	655	29	12	6	3
7674	168	8,0	655	29	12	6	3
7675	174	8,0	655	29	12	6	3
7676	177	7,9	628	29	11	5	2
7677	116	7,9	628	29	11	5	2
7678	115	8,0	628	29	11	5	2
7679	150	8,1	670	25	8	3	1
7680	135	8,5	670	25	8	3	1
7681	153	12,0	1040	39	17	5	3
7682	85	14,3	1248	48	17	5	3
7683	151	14,3	1248	48	17	5	3
7684	134	14,5	1248	48	17	7	4
7685	135	11,4	969	37	16	7	4
7686	127	11,6	969	37	16	7	4

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7687	129	10,6	889	39	14	8	3
7688	148	10,6	889	39	14	8	3
7689	153	10,9	926	39	14	4	2
7690	159	11,3	964	40	15	4	2
7691	163	11,2	920	39	20	4	2
7692	78	12,4	1044	37	15	8	5
7693	124	12,4	1044	37	15	8	5
7694	109	12,4	1044	37	15	8	5
7695	162	14,2	1167	46	16	7	3
7696	119	14,2	1167	46	16	7	3
7697	81	15,7	1292	48	18	14	9
7698	105	15,7	1292	48	18	14	9
7699	125	16,1	1356	46	21	14	10
7700	166	16,2	1356	46	21	12	10
7701	183	16,4	1356	46	21	12	10
7702	162	15,8	1320	48	19	12	6
7703	192	15,0	1284	51	17	5	2
7704	155	15,3	1363	49	20	4	1
7705	140	15,3	1363	49	20	4	1
7706	147	15,6	1363	49	20	4	1
7707	159	15,8	1363	49	20	4	1
7708	186	17,5	1480	50	22	10	6
7709	170	17,5	1487	43	18	9	11
7710	183	17,4	1487	43	18	9	11
7711	171	17,4	1487	43	18	9	11
7712	139	16,2	1434	53	23	2	2
7713	149	16,9	1434	53	23	2	2
7714	132	17,4	1436	57	22	2	10
7715	124	17,4	1436	57	22	2	10
7716	142	17,4	1436	57	22	2	10
7717	159	17,4	1436	57	22	2	10
7718	128	18,2	1570	70	28	0	2
7719	141	18,4	1606	69	25	2	6
7720	151	18,5	1606	69	25	2	6
7721	139	18,6	1606	69	25	2	6
7722	147	18,6	1622	57	25	10	1
7723	154	18,6	1622	57	25	10	1
7724	165	18,7	1618	62	22	12	1
7725	145	18,7	1618	62	22	12	1
7726	144	18,9	1618	62	22	12	1
7727	146	19,6	1636	61	25	15	10
7728	109	19,6	1636	61	25	15	10
7729	154	19,6	1636	61	25	15	10
7730	125	18,1	1628	58	17	0	3
7731	113	18,4	1628	58	17	0	3
7732	117	21,0	1831	72	25	1	5
7733	130	21,0	1831	72	25	1	5
7734	127	21,4	1874	69	28	5	10
7735	133	21,9	1874	69	28	5	10
7736	108	35,1	3025	107	47	23	7
7737	125	35,1	3025	107	47	23	7

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7738	140	26,2	2348	77	35	1	2
7739	157	26,5	2348	77	35	1	2
7740	149	22,8	2006	78	24	2	3
7741	170	22,8	2006	78	24	2	3
7742	209	22,3	1948	74	17	2	9
7743	194	21,7	1889	70	10	1	15
7744	194	21,8	1889	70	10	1	15
7745	204	21,8	1889	70	10	1	15
7746	180	20,8	1857	62	27	3	1
7747	192	20,8	1857	62	27	3	1
7748	201	20,8	1857	62	27	3	1
7749	202	20,3	1815	60	25	2	1
7750	189	19,7	1773	58	23	0	1
7751	152	19,9	1773	58	23	0	1
7752	91	19,7	1694	60	21	7	10
7753	106	19,8	1694	60	21	7	10
7754	152	19,9	1694	60	21	7	10
7755	135	19,2	1634	62	19	13	5
7756	155	19,1	1634	62	19	13	5
7757	164	18,9	1634	62	19	13	5
7758	150	10,8	774	30	17	0	17
7759	128	16,2	1383	63	32	3	1
7760	104	16,2	1383	63	32	3	1
7761	158	16,5	1383	63	32	3	1
7762	160	5,5	400	17	7	7	4
7763	123	5,5	400	17	7	7	4
7764	184	5,5	400	17	7	7	4
7765	126	5,2	379	9	9	1	12
7766	167	5,2	379	9	9	1	12
7767	166	5,2	379	9	9	1	12
7768	144	6,0	422	26	1	2	10
7769	144	6,0	422	26	1	2	10
7770	181	6,0	422	26	1	2	10
7771	156	5,7	450	15	10	6	9
7772	135	5,7	450	15	10	6	9
7773	145	6,6	450	15	10	6	9
7774	143	6,0	458	13	6	1	1
7775	142	6,0	458	13	6	1	1
7776	127	7,2	611	28	2	2	6
7777	153	7,2	611	28	2	2	6
7778	135	8,0	640	32	1	4	10
7779	110	9,0	670	36	5	5	14
7780	181	9,0	670	36	5	5	14
7781	112	12,6	1062	42	17	1	1
7782	93	12,7	1062	42	17	1	1
7783	98	21,7	1771	89	49	6	1
7784	143	22,6	1771	89	49	6	1
7785	172	53,3	4339	256	138	1	2
7786	157	53,3	4339	256	138	1	2
7787	154	58,6	4764	274	146	1	8
7788	161	64,0	5189	292	154	1	14

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7789	194	64,0	5189	292	154	1	14
7790	196	65,3	5289	304	157	2	13
7791	171	66,5	5389	315	160	2	11
7792	165	66,5	5389	315	160	2	11
7793	196	66,5	5389	315	160	2	11
7794	167	50,3	4203	242	119	1	11
7795	147	50,3	4203	242	119	1	11
7796	148	50,4	4221	239	113	1	9
7797	198	50,5	4239	236	107	1	7
7798	187	50,6	4239	236	107	1	7
7799	152	50,7	4239	236	107	1	7
7800	156	62,9	5271	294	137	2	8
7801	192	62,9	5271	294	137	2	8
7802	178	63,6	5271	294	137	2	8
7803	147	64,3	5271	294	137	2	8
7804	157	69,6	5739	313	155	1	5
7805	154	69,6	5739	313	155	1	5
7806	185	65,8	5568	303	145	1	6
7807	167	66,2	5568	303	145	1	6
7808	178	66,7	5568	303	145	1	6
7809	105	51,4	4284	241	108	1	3
7810	145	51,4	4284	241	108	1	3
7811	139	44,2	3688	200	100	1	2
7812	161	44,2	3688	200	100	1	2
7813	148	42,7	3508	189	86	30	6
7814	154	42,7	3508	189	86	30	6
7815	153	42,7	3508	189	86	30	6
7816	163	40,0	3264	165	81	18	12
7817	149	40,0	3264	165	81	18	12
7818	145	35,7	2908	146	71	22	12
7819	151	35,7	2908	146	71	22	12
7820	145	35,8	2908	146	71	22	12
7821	190	35,9	2908	146	71	22	12
7822	132	36,4	3031	147	64	23	9
7823	182	36,5	3031	147	64	23	9
7824	158	36,6	3031	147	64	23	9
7825	137	40,2	3394	150	69	23	6
7826	99	39,9	3384	153	75	21	4
7827	83	40,4	3384	153	75	21	4
7828	78	39,0	3331	162	76	2	1
7829	107	45,7	3734	186	90	31	5
7830	93	46,0	3734	186	90	29	5
7831	98	42,4	3471	184	80	29	1
7832	96	42,9	3471	184	80	29	1
7833	81	43,4	3513	168	85	30	11
7834	83	44,2	3578	180	88	30	10
7835	86	44,3	3760	184	94	1	2
7836	85	41,6	3426	184	94	1	2
7837	112	41,6	3426	184	94	1	2
7838	135	36,4	3022	160	80	4	2
7839	112	31,3	2619	137	66	7	3

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7840	172	33,4	2786	140	67	7	3
7841	179	35,5	2953	143	67	7	3
7842	198	35,5	2953	143	67	1	1
7843	176	39,4	3295	166	76	1	6
7844	189	43,2	3638	189	85	1	11
7845	193	43,2	3638	189	85	0	11
7846	148	43,2	3638	189	85	29	11
7847	140	39,4	3241	167	78	29	12
7848	190	35,5	2845	146	72	29	13
7849	155	31,9	2623	133	64	26	14
7850	172	28,2	2402	120	55	23	14
7851	149	23,2	1909	96	54	18	8
7852	98	23,0	1869	97	52	18	10
7853	181	22,8	1830	97	50	18	13
7854	203	22,8	1830	97	50	9	13
7855	188	22,8	1830	97	50	9	13
7856	119	19,0	1588	83	40	4	3
7857	175	19,0	1588	83	40	4	3
7858	95	11,2	848	44	23	13	6
7859	78	11,2	848	44	23	13	6
7860	161	9,0	681	41	23	15	1
7861	124	9,0	681	41	23	15	1
7862	175	10,0	755	33	23	11	7
7863	158	10,0	755	33	23	11	7
7864	151	10,0	755	33	23	11	7
7865	136	30,8	2511	131	67	1	9
7866	143	30,8	2511	131	67	1	9
7867	106	56,7	4714	227	130	1	9
7868	136	56,7	4714	227	130	1	6
7869	124	56,7	4714	227	130	32	9
7870	135	35,4	2852	137	77	32	9
7871	143	35,4	2852	137	77	32	9
7872	179	28,9	2270	108	60	30	1
7873	181	28,9	2270	108	60	30	1
7874	154	28,9	2270	108	60	30	1
7875	173	33,0	2734	136	69	1	1
7876	159	33,0	2734	136	69	1	1
7877	173	40,9	3296	178	105	1	13
7878	161	40,9	3296	178	105	1	13
7879	110	40,9	3296	178	105	1	13
7880	159	38,9	3171	168	96	1	8
7881	144	36,8	3046	158	87	1	2
7882	148	36,8	3046	158	87	1	2
7883	142	33,5	2780	140	71	1	3
7884	182	30,1	2514	121	55	1	4
7885	219	30,3	2530	121	55	1	5
7886	123	29,6	2530	120	48	1	5
7887	169	29,6	2530	120	48	1	5
7888	113	31,3	2686	113	52	2	1
7889	149	31,3	2686	113	52	2	1
7890	55	32,7	2769	113	52	16	3

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7891	185	31,7	2769	109	48	16	3
7892	153	42,8	3540	145	68	27	10
7893	170	43,0	3540	150	70	27	10
7894	100	43,2	3540	155	73	27	10
7895	130	41,5	3484	155	73	2	9
7896	78	41,5	3484	155	73	2	9
7897	96	41,0	3453	151	72	1	7
7898	213	40,6	3421	148	72	1	6
7899	158	61,3	5103	236	122	45	7
7900	100	61,9	5103	236	122	45	7
7901	94	53,3	4414	191	92	32	5
7902	55	75,8	6212	281	140	32	20
7903	171	73,5	6212	281	140	0	20
7904	110	84,4	7083	303	155	2	20
7905	124	83,6	7083	303	155	2	2
7906	116	84,3	7083	309	169	2	6
7907	164	83,8	7077	309	169	1	6
7908	63	74,8	6316	283	148	1	4
7909	122	65,9	5556	258	127	1	2
7910	133	66,0	5556	258	127	1	5
7911	188	66,2	5556	258	127	1	8
7912	180	58,1	4817	216	111	20	10
7913	109	50,0	4078	174	96	39	11
7914	197	41,3	3366	145	82	39	11
7915	173	41,3	3366	145	82	39	11
7916	165	41,3	3366	145	82	39	11
7917	124	35,5	3103	115	66	1	3
7918	155	36,2	3112	118	66	1	3
7919	156	37,0	3120	121	66	1	3
7920	103	36,9	3120	121	64	1	2
7921	90	39,5	3342	132	68	14	4
7922	171	42,2	3565	143	71	28	6
7923	94	166,5	14019	606	342	28	19
7924	84	165,5	14019	606	342	1	19
7925	121	167,6	14019	606	342	1	19
7926	128	121,1	9994	470	260	1	1
7927	83	93,1	7702	360	194	1	1
7928	167	65,1	5409	250	128	0	1
7929	73	65,2	5409	250	128	0	3
7930	129	54,5	4644	204	105	0	3
7931	113	55,6	4644	204	105	29	4
7932	147	50,7	4234	185	93	29	4
7933	165	45,7	3823	167	81	29	4
7934	195	36,2	3029	124	66	15	1
7935	171	36,3	3029	124	66	15	1
7936	98	35,0	2934	122	63	10	2
7937	121	34,2	2839	120	60	20	3
7938	77	32,7	2791	114	56	20	3
7939	136	34,1	2852	118	56	24	3
7940	100	34,1	2852	118	56	24	3
7941	45	30,5	2623	104	47	19	1

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7942	61	32,8	2871	93	53	6	7
7943	86	33,3	2871	112	53	6	7
7944	90	33,0	2797	112	48	9	6
7945	49	30,6	2373	117	64	27	13
7946	52	29,2	2267	112	61	26	12
7947	54	27,9	2161	106	59	26	12
7948	117	26,6	2055	100	57	25	11
7949	117	25,2	1948	95	54	25	10
7950	178	23,9	1842	90	52	24	10
7951	188	22,6	1736	84	49	24	9
7952	199	21,2	1630	78	47	23	8
7953	165	19,9	1524	73	44	22	7
7954	169	18,6	1418	68	42	22	7
7955	195	17,2	1312	62	39	21	6
7956	182	15,9	1206	56	37	21	5
7957	171	14,6	1099	51	34	20	5
7958	165	14,6	1099	51	34	20	5
7959	160	14,6	1099	51	34	20	5
7960	186	14,6	1099	51	34	20	5
7961	167	15,0	1162	56	33	10	3
7962	174	15,4	1225	61	31	1	1
7963	169	15,4	1225	61	31	1	1
7964	154	15,4	1225	61	31	1	1
7965	166	15,4	1225	61	31	1	1
7966	153	15,4	1225	61	31	1	1
7967	195	22,1	1806	75	36	9	4
7968	144	28,8	2388	88	41	17	8
7969	110	28,4	2388	88	41	17	8
7970	197	28,4	2388	88	41	17	8
7971	195	28,4	2388	88	41	17	8
7972	125	28,4	2388	88	41	17	8
7973	159	28,5	2388	88	41	18	8
7974	194	28,6	2388	88	41	20	8
7975	210	25,1	2109	74	37	20	5
7976	146	21,6	1830	60	33	20	3
7977	124	21,6	1830	60	33	20	3
7978	145	21,6	1830	60	33	20	3
7979	157	17,6	1497	52	25	13	2
7980	143	17,5	1497	52	25	12	2
7981	167	17,5	1497	52	25	12	2
7982	195	17,2	1497	52	25	2	2
7983	186	21,1	1725	63	40	13	3
7984	155	14,6	1180	57	26	13	2
7985	140	14,6	1180	57	26	12	2
7986	110	14,7	1180	57	26	12	2
7987	145	10,0	825	34	15	4	2
7988	179	10,0	825	34	15	4	2
7989	167	10,0	825	34	15	4	2
7990	175	12,3	1015	40	21	11	2
7991	128	12,2	1015	40	21	11	2
7992	139	12,2	1015	40	21	11	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
7993	157	15,9	1347	55	27	6	4
7994	176	20,0	1678	71	33	13	6
7995	170	20,0	1678	71	33	13	6
7996	125	20,0	1678	71	33	13	6
7997	134	23,7	2037	84	37	8	5
7998	155	27,8	2396	97	42	15	3
7999	178	36,5	3126	133	60	21	2
8000	134	45,2	3857	169	78	26	2
8001	143	45,2	3857	169	78	26	2
8002	106	45,2	3857	169	78	26	2
8003	194	38,5	3275	139	66	13	6
8004	189	32,4	2693	110	53	20	8
8005	178	32,3	2693	110	53	20	5
8006	185	32,2	2693	110	53	20	3
8007	156	22,8	1928	76	34	5	2
8008	133	22,7	1928	76	34	5	2
8009	85	18,0	1504	57	23	13	3
8010	131	16,9	1342	57	25	12	8
8011	156	15,8	1181	57	28	12	10
8012	155	12,0	952	45	22	4	8
8013	153	11,7	952	45	20	4	5
8014	166	11,6	952	45	18	4	5
8015	134	7,9	553	29	11	4	5
8016	88	7,9	553	29	11	4	5
8017	91	5,8	454	21	13	4	2
8018	90	5,4	425	18	13	2	2
8019	127	5,3	397	15	13	2	8
8020	125	5,5	420	18	13	2	5
8021	174	5,9	443	20	13	4	5
8022	181	5,5	443	20	8	4	2
8023	184	5,5	443	20	8	4	2
8024	187	5,5	443	20	8	4	2
8025	101	8,4	582	35	10	4	5
8026	102	8,4	582	35	10	2	5
8027	103	8,4	582	35	10	2	5
8028	100	8,4	582	35	10	2	5
8029	144	8,6	607	35	13	2	2
8030	154	8,9	633	35	16	2	2
8031	179	8,4	633	29	16	2	1
8032	164	7,9	633	23	16	3	1
8033	169	6,5	554	16	11	3	1
8034	106	7,2	565	10	12	12	5
8035	131	7,2	565	10	12	12	5
8036	170	10,8	871	32	12	12	5
8037	98	14,4	1177	55	12	12	5
8038	155	30,2	2501	108	54	22	5
8039	112	30,2	2501	108	54	22	5
8040	144	67,0	5524	268	124	35	5
8041	98	103,7	8547	428	193	47	5
8042	175	33,2	2738	133	60	22	2
8043	149	33,3	2738	133	60	22	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8044	105	33,7	2738	133	60	22	8
8045	229	19,4	1569	75	27	17	2
8046	210	19,4	1569	75	27	17	2
8047	220	19,4	1569	75	27	17	2
8048	155	16,8	1348	64	26	17	7
8049	195	13,9	1126	52	24	18	5
8050	175	14,0	1126	52	24	20	5
8051	200	14,0	1126	52	24	20	5
8052	199	13,7	1053	44	23	20	8
8053	170	13,7	1053	44	23	20	8
8054	185	13,7	1053	44	23	20	8
8055	163	13,4	1053	44	23	17	5
8056	205	58,9	4895	254	122	17	5
8057	159	58,9	4895	254	122	17	5
8058	235	58,9	4895	254	122	17	5
8059	207	123,8	10122	549	260	18	2
8060	217	123,9	10122	549	260	20	2
8061	180	124,1	10122	549	260	20	8
8062	166	124,1	10122	549	260	20	7
8063	169	40,6	3375	167	84	20	14
8064	150	41,4	3375	167	84	17	14
8065	113	17,3	1322	64	28	17	10
8066	177	17,3	1322	64	28	17	10
8067	175	17,4	1322	64	28	17	10
8068	195	17,5	1322	64	28	18	10
8069	223	15,6	1190	56	22	20	6
8070	235	13,6	1058	47	16	20	3
8071	225	13,3	1054	46	19	17	6
8072	228	13,0	1050	44	22	17	9
8073	175	13,0	1050	44	22	17	9
8074	218	13,0	1050	44	22	17	9
8075	156	14,2	1086	48	30	18	7
8076	120	14,2	1086	48	30	20	7
8077	154	14,2	1086	48	30	20	7
8078	175	12,9	1069	36	24	20	2
8079	202	13,1	1069	36	24	20	2
8080	88	14,2	1172	44	20	20	2
8081	109	14,4	1172	44	20	17	2
8082	111	14,6	1220	42	19	17	2
8083	105	14,6	1220	42	19	17	2
8084	103	17,0	1358	49	28	17	15
8085	120	17,0	1358	49	28	18	15
8086	149	19,9	1666	70	35	20	3
8087	139	20,2	1666	70	35	20	3
8088	159	20,1	1691	69	29	20	2
8089	152	19,2	1619	65	27	17	2
8090	151	18,3	1547	60	25	17	2
8091	149	17,4	1475	56	22	17	3
8092	143	17,4	1475	56	22	17	3
8093	125	17,5	1475	56	22	18	3
8094	151	14,9	1195	39	20	20	2

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8095	120	15,3	1242	49	21	20	6
8096	149	15,2	1242	49	21	17	6
8097	172	14,5	1105	45	23	17	15
8098	113	14,6	1105	45	23	17	15
8099	130	16,7	1394	41	23	17	5
8100	103	17,2	1434	55	24	17	6
8101	112	17,3	1434	55	24	18	6
8102	145	17,4	1434	55	24	20	6
8103	121	17,2	1365	58	25	20	4
8104	131	22,9	1863	79	38	20	9
8105	128	23,1	1863	79	38	20	9
8106	140	23,4	1863	79	38	20	9
8107	151	38,2	3189	138	73	20	11
8108	153	55,8	4715	217	105	10	7
8109	170	74,1	6242	295	136	22	3
8110	152	79,8	6242	295	136	22	3
8111	146	86,0	6242	295	136	35	3
8112	147	414,0	33986	1802	960	47	24
8113	100	412,8	33986	1802	960	22	18
8114	146	412,8	33986	1802	960	22	18
8115	150	178,0	14693	781	389	22	18
8116	134	151,2	12484	645	322	40	11
8117	146	123,8	10275	510	256	40	4
8118	169	127,9	10275	510	256	40	4
8119	180	144,1	11644	599	288	40	6
8120	174	144,1	11644	599	288	40	6
8121	132	145,0	11802	576	286	53	11
8122	175	147,0	11960	554	285	105	10
8123	120	155,1	12696	611	309	53	9
8124	172	164,6	13433	668	333	47	5
8125	165	165,4	13433	668	333	22	5
8126	106	167,0	13433	668	333	22	5
8127	144	209,8	16988	875	455	22	8
8128	147	210,4	16988	875	455	40	8
8129	185	190,2	15482	743	399	40	8
8130	186	188,9	15482	743	399	40	8
8131	192	85,4	6906	332	167	71	6
8132	175	85,4	6906	332	167	71	6
8133	147	30,5	2424	121	60	23	6
8134	127	30,5	2424	121	60	23	6
8135	132	31,5	2424	121	60	23	6
8136	153	161,2	12825	594	306	112	20
8137	187	110,1	8554	453	221	89	4
8138	45	34,1	2732	132	72	33	6
8139	78	22,9	1759	88	46	23	6
8140	71	22,0	1638	94	42	29	9
8141	49	20,2	1586	76	42	20	6
8142	48	22,2	1785	82	43	25	8
8143	47	23,6	1868	79	45	23	9
8144	47	22,9	1852	90	46	18	5
8145	65	24,4	1855	91	50	26	3

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8146	74	24,4	1855	91	50	26	3
8147	120	32,8	2235	122	84	34	17
8148	140	33,0	2235	122	84	34	17
8149	103	30,0	1997	90	79	51	12
8150	117	29,8	1997	90	79	51	12
8151	145	29,8	1997	90	79	51	12
8152	84	22,7	1687	84	57	36	10
8153	79	20,2	1538	71	52	30	9
8154	104	19,1	1423	62	45	26	9
8155	83	19,0	1423	62	45	27	7
8156	63	18,1	1415	61	37	28	15
8157	45	21,6	1706	74	43	25	14
8158	87	25,0	1997	87	49	24	12
8159	115	24,4	1892	88	44	22	10
8160	108	23,9	1894	86	45	21	6
8161	90	19,4	1559	73	38	19	3
8162	101	19,4	1559	73	38	19	3
8163	106	15,7	1239	53	35	22	5
8164	115	16,0	1239	53	34	22	5
8165	100	15,6	1194	50	32	22	6
8166	78	15,7	1194	50	32	22	6
8167	116	18,3	1359	63	36	26	6
8168	107	21,1	1606	74	41	28	4
8169	129	21,1	1606	74	41	28	4
8170	141	29,7	2358	103	57	25	5
8171	111	29,8	2358	103	57	25	5
8172	95	30,4	2434	113	61	32	5
8173	90	30,7	2434	113	61	32	5
8174	96	21,5	1614	76	42	22	5
8175	68	20,0	1451	72	42	22	10
8176	65	20,2	1530	77	42	26	14
8177	48	21,6	1709	82	47	20	4
8178	38	21,7	1709	82	47	21	4
8179	64	27,9	2314	107	64	18	7
8180	66	26,3	2137	92	60	6	7
8181	65	26,3	2137	92	60	6	7
8182	71	25,6	2080	90	60	15	9
8183	79	25,0	2023	89	59	24	12
8184	101	24,3	1965	87	59	33	14
8185	130	27,1	2100	105	61	38	14
8186	83	27,3	2100	111	61	38	11
8187	100	27,3	2046	111	58	34	4
8188	106	27,3	2046	111	58	34	4
8189	98	22,5	1885	84	55	11	1
8190	105	23,6	1885	90	55	25	2
8191	90	23,6	1742	90	49	25	8
8192	121	23,0	1742	85	49	25	8
8193	81	23,0	1742	85	49	25	8
8194	121	20,3	1615	75	42	24	15
8195	83	20,3	1615	72	42	24	15
8196	79	20,3	1615	70	42	24	15

DEPTH ft.	R.O.P. ft/h.	T. GAS units	CHROMATOGRAPHY (ppm)				
			C1	C2	C3	C4	C5
8197	61	19,1	1555	72	39	21	3
8198	72	25,8	1898	90	53	34	6

FLUORESCENCE DATA RECORD

WELL: LO6-30D

INTERVALS (Feet)	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.
2630-2860	TEREBRATULA		x					PL YEL	x	x				x				x		x			YEL WH	MKY WH	NIL
2860-2890	TEREBRATULA						5	PL YEL	x	x				x			x			x			PL YELSH WH	MKY WH	NIL
2890-2920	TEREBRATULA						10	PL YEL	x	x				x			x			x			PL YELSH WH	MKY WH	NIL
2920-2950	TEREBRATULA						20	PL YEL	x	x				x			x			x			PL YELSH WH	MKY WH	NIL
2950-2980	TEREBRATULA						5	PL YEL	x	x				x			x			x			PL YELSH WH	MKY WH	NIL
2980-3010	TEREBRATULA		x					PL YEL	x	x				x			x			x			PL YELSH WH	MKY WH	NIL
3010-3040	TEREBRATULA						5	PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
3040-3070	TEREBRATULA		x					PL YEL	x	x				x			x			x			PL YELSH WH	MKY WH	NIL
3070-3100	TEREBRATULA		x					PL YEL	x	x				x			x			x			PL YELSH WH	MKY WH	NIL
4330-4360	CHACRA		x					PL YEL	x	x				x			x			x			YEL WH	MKY WH	NIL
4360-4390	CHACRA		x					PL YEL	x	x				x			x			x			YEL WH	MKY WH	NIL
5800-5810	CHACRA		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5810-5820	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5820-5830	RIO BRAVO						5	PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5830-5840	RIO BRAVO						10	PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5840-5850	RIO BRAVO						30	PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5850-5860	RIO BRAVO						20	PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5860-5870	RIO BRAVO						20	PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5870-5880	RIO BRAVO						10	PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5880-5890	RIO BRAVO						5	PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL

FLUORESCENCE DATA RECORD

WELL: LO6-30D

INTERVALS (Feet)	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.
5890-5900	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5900-5910	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5910-5920	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5920-5930	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5930-5940	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
5940-5950	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
6000-6010	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
6010-6020	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
6020-6030	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
6030-6040	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
6210-6220	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	YELSH WH	NIL
6220-6230	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	YELSH WH	NIL
6230-6240	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	YELSH WH	NIL
6270-6280	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	YELSH WH	NIL
6290-6300	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	YELSH WH	NIL
6300-6310	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	YELSH WH	NIL
6310-6320	RIO BRAVO		x				5	PL YEL		x				x			x			x			PL YELSH WH	YELSH WH	NIL
6320-6330	RIO BRAVO						10	PL YEL		x				x			x			x			PL YELSH WH	YELSH WH	NIL
6410-6420	RIO BRAVO		x					PL YEL		x				x			x			x			PL YELSH WH	MKY WH	NIL
6420-6430	RIO BRAVO		x				10	PL YEL	x	x				x			x			x			PL YELSH WH	MKY WH	NIL

FLUORESCENCE DATA RECORD

WELL: LO6-30D

INTERVALS (Feet)	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.
6430-6440	RIO BRAVO						5	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6440-6450	RIO BRAVO						10	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6450-6460	RIO BRAVO						20	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6460-6470	RIO BRAVO						20	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6470-6480	RIO BRAVO						20	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6480-6490	RIO BRAVO						15	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6490-6500	RIO BRAVO						30	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6500-6510	RIO BRAVO						20	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6510-6520	RIO BRAVO						20	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6520-6530	RIO BRAVO						30	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6530-6540	RIO BRAVO						20	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6540-6550	RIO BRAVO						10	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6550-6560	RIO BRAVO						10	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6560-6570	RIO BRAVO						5	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6570-6580	RIO BRAVO						5	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6580-6590	RIO BRAVO						5	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6590-6600	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6600-6610	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6610-6620	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6620-6630	RIO BRAVO						5	PL YEL	x	x				x						x			YELSH WH	MKY WH	NIL

FLUORESCENCE DATA RECORD

WELL: LO6-30D

INTERVALS (Feet)	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.
6630-6640	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6640-6650	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6650-6660	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6660-6670	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6670-6680	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6680-6690	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6690-6700	RIO BRAVO						5	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6700-6710	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6710-6720	RIO BRAVO						5	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6720-6730	RIO BRAVO						10	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6730-6740	RIO BRAVO						5	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6740-6750	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6750-6760	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6760-6770	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6770-6780	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6780-6790	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6790-6800	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6800-6810	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6810-6820	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6820-6830	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL

FLUORESCENCE DATA RECORD

WELL: LO6-30D

INTERVALS (Feet)	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.
6830-6840	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6840-6850	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6850-6860	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6860-6870	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6870-6880	RIO BRAVO						5	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6880-6890	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6890-6900	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6900-6910	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6910-6920	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6920-6930	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6930-6940	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6940-6950	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6950-6960	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6960-6970	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
6990-7000	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7000-7010	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7010-7020	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7020-7030	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7030-7040	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7040-7050	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL

FLUORESCENCE DATA RECORD

WELL: LO6-30D

INTERVALS (Feet)	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.
7050-7060	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7060-7070	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7070-7080	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7080-7090	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7090-7100	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7100-7110	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7110-7120	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7120-7130	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7130-7140	RIO BRAVO						5	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7140-7150	RIO BRAVO						10	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7150-7160	RIO BRAVO						5	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7160-7170	RIO BRAVO						10	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7170-7180	RIO BRAVO						5	PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7180-7186	RIO BRAVO		x					PL YEL	x	x				x			x			x			YELSH WH	MKY WH	NIL
7420-7430	RIO BRAVO						10	PL YEL	x	x				x			x			x			PAL YELSH	NIL	NIL
7430-7440	RIO BRAVO						30	GLD YEL	x	x				x			x			x			PAL YELSH	MKY WH	NIL
7440-7450	RIO BRAVO						30	GLD YEL	x	x				x			x			x			LT YESH WH	MKY WH	NIL
7450-7460	RIO BRAVO						20	GLD YEL	x	x				x			x			x			LT YESH WH	MKY WH	NIL
7460-7470	RIO BRAVO						5	GLD YEL		x				x			x			x			LT YESH WH	MKY WH	NIL
7780-7790	RIO BRAVO						20	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL

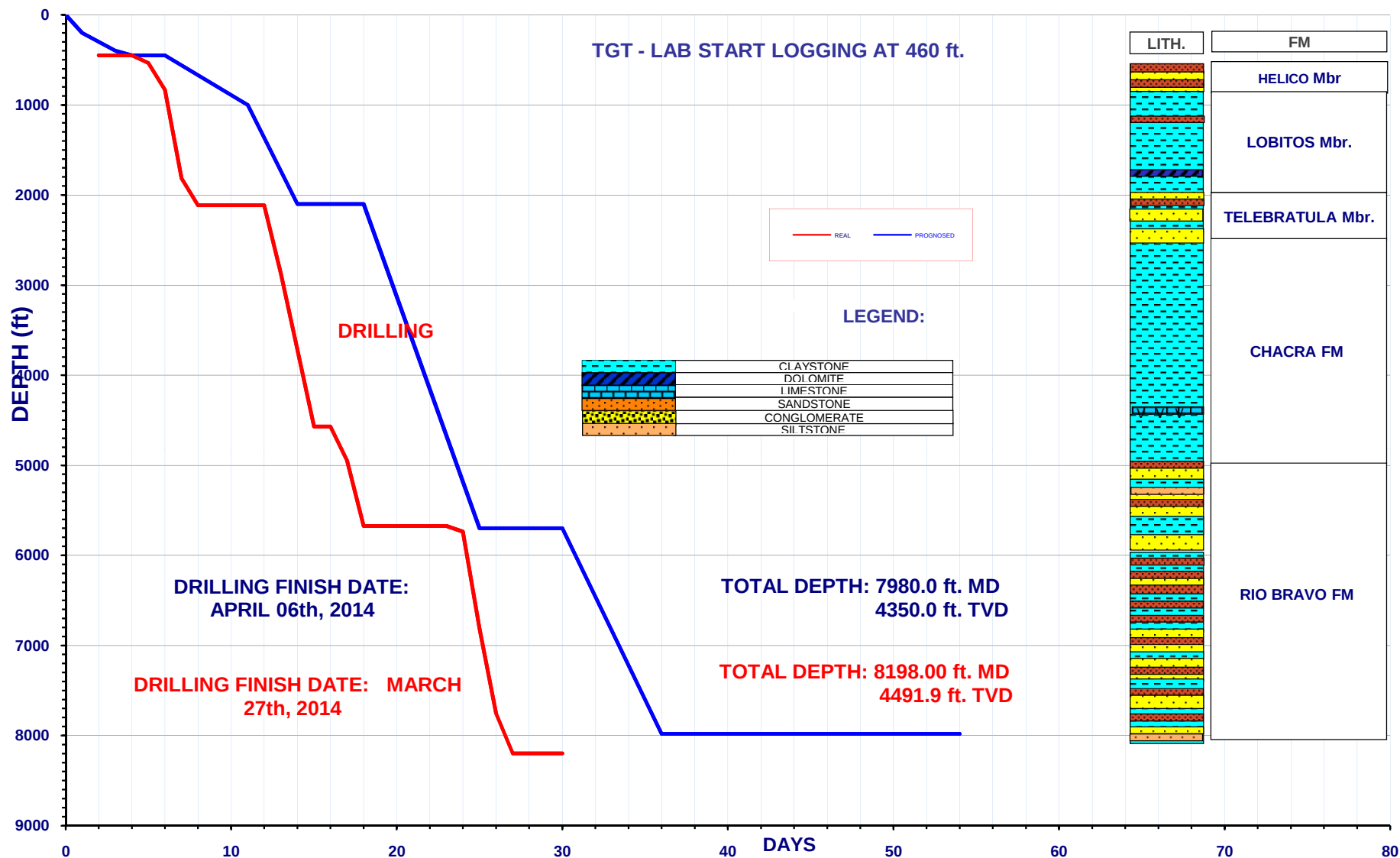
FLUORESCENCE DATA RECORD

WELL: LO6-30D

INTERVALS (Feet)	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.
7790-7800	RIO BRAVO						10	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7800-7810	RIO BRAVO						25	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7810-7820	RIO BRAVO						20	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7820-7830	RIO BRAVO						30	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7830-7840	RIO BRAVO						25	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7840-7850	RIO BRAVO						30	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7850-7860	RIO BRAVO						20	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7860-7870	RIO BRAVO						20	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7870-7880	RIO BRAVO						20	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7880-7890	RIO BRAVO						15	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7890-7900	RIO BRAVO						15	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7900-7910	RIO BRAVO						15	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7910-7920	RIO BRAVO						20	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7920-7930	RIO BRAVO						20	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7930-7940	RIO BRAVO						20	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7940-7950	RIO BRAVO						5	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7950-7960	RIO BRAVO						10	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7960-7970	RIO BRAVO						5	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7970-7980	RIO BRAVO						5	YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL
7980-7990	RIO BRAVO		x					YELSH WH		x			x				x			x			LT YESH WH	MKY WH	NIL

[illegible]

DRILLING PROGRESS CURVE WELL : LO6-30D





BIT RECORD



WELL: LO6-30D

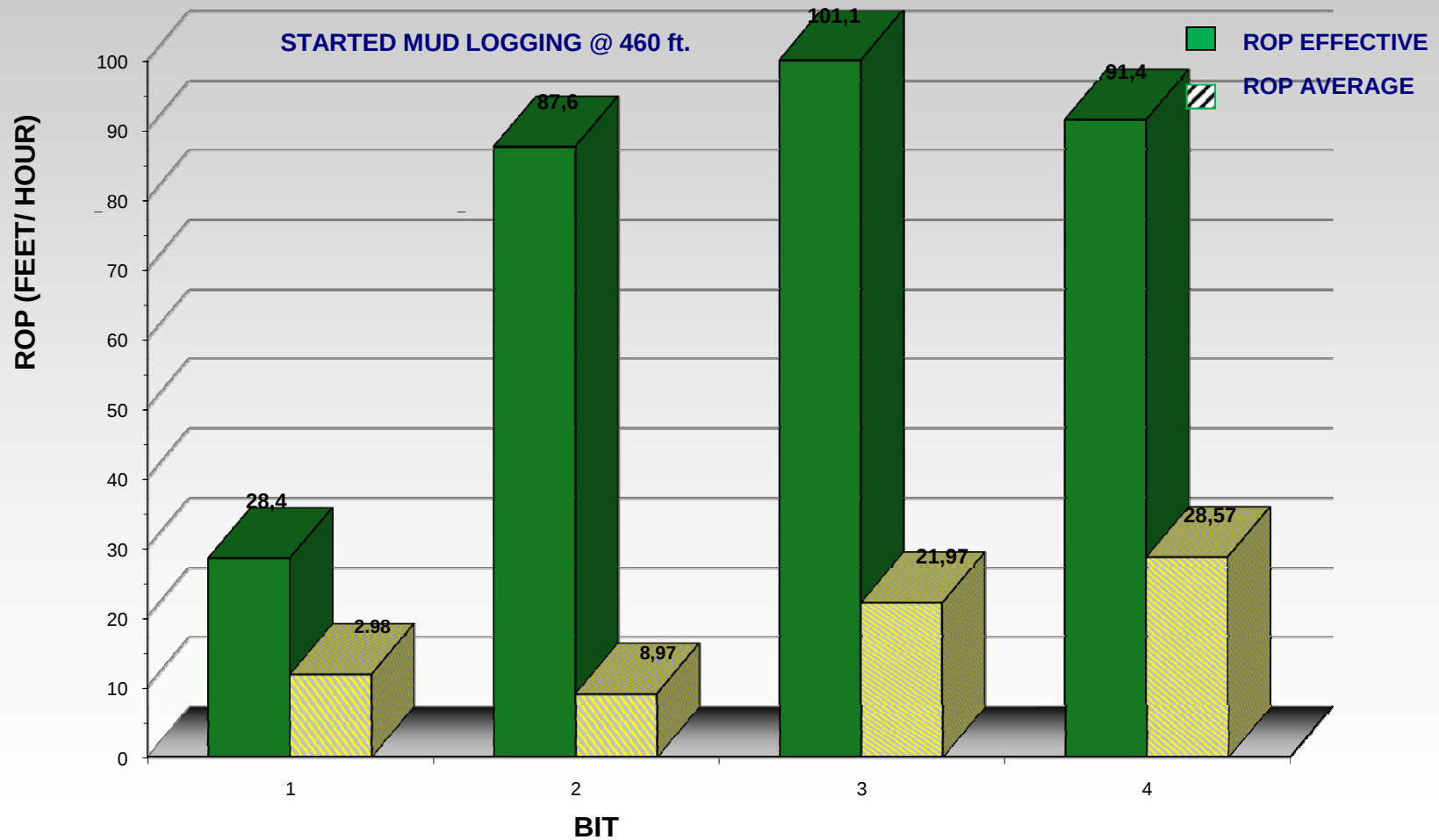
* STARTED MUD LOGGING @ 460 ft.

BIT	SIZE	MAKE	TYPE	SERIAL	DEPTH		HOLE	ROP Effective	HOURS	HOURS	JETS	GPM/PSI	WOB/RPM Klbs / rpm	IADC
	IN				IN	OUT		M/HR	Total	Drilling				
1	17	-	T11	D173936	450	832	382	28,4	32,5	13,4	4X16	680/1320	15/56	1-1-ER-M-E-I-NO-BHA
2	17	NOV	TFH519S-A1	E159172	832	2115	1283	87,6	143,1	14,7	2X15; 3X14	800/2550	15/55	0-1-BT-G-X-I-NO-TD
3	12 1/4	ULTERRA	U419S	23662	2115	5675	3560	101,1	162,0	35,2	6X14	800/3500	18/100	1-3-BT-S-X-I-NO-TD
4	8 1/2	HALLIBURTON	FX56	12392701	5675	8198	2523	91,4	88,3	27,6	5X13; 2X14	550/2700	20/100	0-1-CT-G-X-I-NO-TD

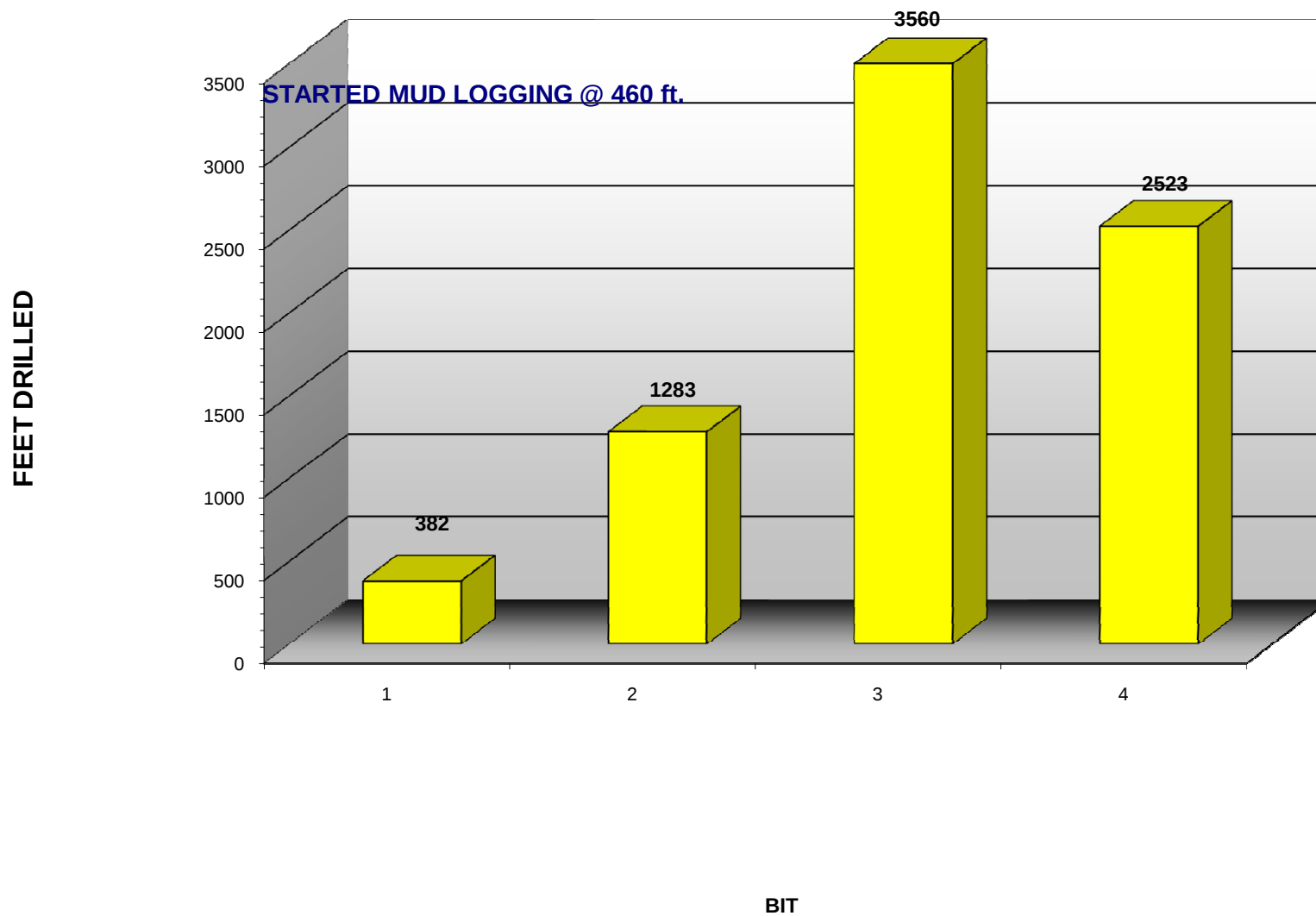
FORMATIONS: MD (ft) TVD (ft)

HELICO Mbr	0	0,0
LOBITOS	757	752,2
TEREBRATULA	2855	2064,0
CHACRA	3120	2173,2
RIO BRAVO	5816	3293,5
TD	8198	4491,9

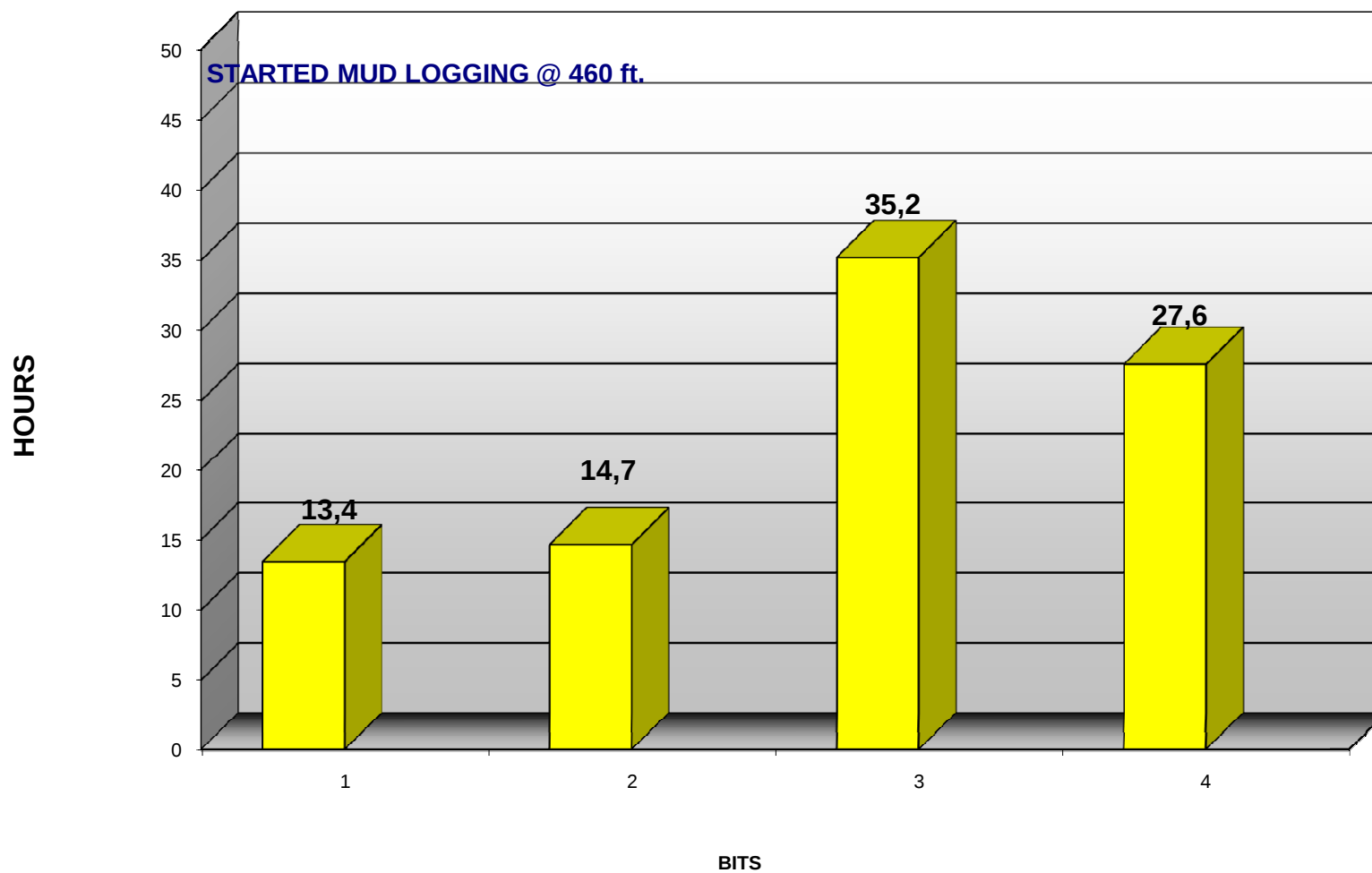
WELL : LO6-30D
**EFFECTIVE AND AVERAGE RATE OF
PENETRATION BY BIT (ft/hr)**



WELL : LO6-30D
FEET DRILLING BY BIT



WELL : LO6-30D
EFFECTIVE DRILLING HOURS



DAILY OPERATIONS REPORTS

WELL: LO6-30D

March 05th, 2014

00:00 - 02:00	Cont. WOC, MU 17" tooth bit (S/N:D173936, jets 4x16), 8" DC, 2x6 1/2" DC and 5" HHWD from surface to 200 ft.
02:00 - 03:00	Cont. TIH 17" tooth bit from 200 ft to 445 ft, tag hard cement to 445 ft.
03:00 - 03:30	DOC from 445 ft to 450 ft with WOB 5-7, 400 gpm, 40 rpm and 400 psi.
03:00 - 04:00	Rotate drilling from 450 ft to 465 ft with WOB 5-7, 500 gpm, 40 rpm and 600 psi.
04:00 - 04:30	Circ. and wait bottom sample: 80% formation and 20% cement.
04:00 - 06:00	POOH 17" tooth bit from 465 ft to surface.
06:00 - 08:00	M/U and TIH 11" magnet to 465 ft. Work magnet and Pooh, recover 1 kg debris.
08:00 - 09:00	Perform 2do run 11" magnet to 465 ft, no show debris.
09:00 - 10:00	M/U and TIH 17" tooth bit to 465 ft, circulate and clean bottom.
10:00 - 11:00	Pooh 17" tooth bit.
11:00 - 12:00	Perform 3er run 11" magnet to 465 ft, no show debris.
12:00 - 15:00	M/U direction BHA with 17" tooth bit, mud motor BH 1.41 deg, float sub, UBHO, 8" DC, X/O, HWDP to 465 ft.
15:00 - 16:00	Change fluid water for mud.
16:00 - 18:00	Run #6, Gyrodata multishoot tool to 465 ft and record data.
18:00 - 18:30	SLB analyze Gyro data. @ 417 ft, incl 4.19 deg, azm 257 deg. Tool face 257.04 deg.
18:30 - 00:00	Dir. drill sliding from 465' to 535'. WOB 15 klbs, pres 600 psi, 560 gpm.

March 06th, 2014

00:00 - 01:00	Dir. drill sliding from 535' to 558'. WOB 12-15 klbs, pres 800 psi, 600 gpm.
01:00 - 01:30	Circ. hole with 600 gpm and 780 psi.
01:30 - 02:30	Run #7, Take survey with Gyro to 509 ft, Inc: 6.19 deg, Azi: 254.67 deg.
02:30 - 04:30	Dir. drill sliding from 558' to 605'. WOB 12-15 klbs, pres 870 psi, 600 gpm.
04:30 - 06:30	Dir. drill rotate from 605' to 648'. WOB 12-15 klbs, pres 1200 psi, 700 gpm.
06:30 - 07:00	Circulate and clean hole.
07:00 - 07:30	Run #8, Take survey with Gyro to 600 ft, Inc: 8.92 deg, Azi: 251.94 deg.
07:30 - 09:00	Dir. drill sliding from 648' to 665'. WOB 20 klbs, pres 1242 psi, 700 gpm.
09:00 - 09:30	Dir. drill rotating from 665' to 678', WOB 16 klbs, pres 1190 psi, 680 gpm, 52 rpm.
09:30 - 10:30	Dir. drill sliding from 678' to 700', WOB 11 klbs, pres 1322 psi, 730 gpm.
10:30 - 11:00	Dir. drill rotating from 700' to 708'. WOB 14 klbs, pres 1210 psi, 700 gpm, 48 rpm. Pump vis pill while drilling.
11:00 - 12:30	Dir. drill sliding from 708' to 725'. WOB 18 klbs, pres 1290 psi, 726 gpm.
12:30 - 13:00	Dir. drill rotating from 725' to 741'. WOB 21 klbs, pres 1335 psi, 726 gpm, 63 rpm.
13:00 - 13:30	Circulate and clean 17" hole. Mud weight 9.2 ppg
13:30 - 14:30	Run #9, Take survey with Gyro to 692 ft, Inc: 12.01 deg, Azi: 253.64 deg.
14:30 - 15:30	Dir. drill sliding from 741' to 758', WOB 10 klbs, pres 1430 psi, 755 gpm.
15:30 - 16:00	Dir. drill rotating from 758' to 773', WOB 16 klbs, pres 1490 psi, 750 gpm, 56 rpm.
16:00 - 16:30	Dir. drill sliding from 773' to 790', WOB 18 klbs, pres 1267 psi, 688 gpm.

16:30 - 17:00 Dir. drill rotating from 790' to 806', WOB 15 klbs, pres 1320 psi, 700 gpm, 56 rpm. Mud Weight 9.3 ppg.

17:00 - 17:30 Dir. drill sliding from 806' to 832', WOB 15 klbs, pres 1400 psi, 730 gpm. Mud Weight 9.4 ppg.

17:30 - 18:00 Circulate bottom up, pump hi vis pill. Geology sample FM Helico @ 832 ft, 60% claystone, 20% sand, 20% sandstone.

18:00 - 19:00 Run #10, Take survey with Gyro to 783 ft, Inc: 15.33 deg, Azi: 250.83 deg.

19:00 - 19:30 Circulate and condition hole. Prepare to pooh. Mud weight 9.4 ppg.

19:30 - 00:00 Pooh directional BHA with 17" tricone bit from 832' to surface.

March 07th, 2014

00:00 - 03:00 MU directional BHA MU 17" PDC bit (Type:TFH519S-A1,S/N:E159172, jets 2x15+3x14),Motor (BH:1.41° &16 3/4" sleeve STB),8" Float sub,8" SNMDC, Lower saver sub, Rigid mount w/slim pulse, upper saver sub,

03:00 - 03:30 Pump sweep pill and circ a bottom up with 800 gpm and 2060 psi.

03:30 - 06:00 Dir. drill sliding from 832' to 925', WOB 15 klbs, pres 2250 psi, 800 gpm.

06:00 - 08:00 Accumulate dir. drill rotating from 925' to 1009', WOB 16 klbs, pres 2380 psi, 800 gpm, 55 rpm.

08:00 - 11:00 Accumulate dir. drill sliding from 1009' to 1190'. WOB 13 klbs, pres 2370 psi, 805 gpm. Avg ROP 65 ft/hr.

11:00 - 12:00 Accumulate circulation and survey. Survey @ 1119 ft, incl 27.3 deg, azm 240.8 deg. Last hi vis pill pumped @ 1100 ft.

12:00 - 13:00 Accumulate dir. drill rotating from 1190' to 1256', WOB 16 klbs, pres 2510 psi, 815 gpm, 75 rpm.

13:00 - 14:30 Accumulate dir.drill sliding from 1256' to 1381', WOB 14 klbs, pres 2475 psi, 810 gpm.

14:30 - 15:00 Accumulate circulation and survey. Survey @ 1309 ft, incl 35.1 deg, azm 238.33 deg. Geology sample @ 1330 ft, 100% claystone, Tz sandstone.

15:00 - 16:00 Accumulate dir. drill rotating from 1381' to 1463', WOB 14 klbs, pres 2510 psi, 805 gpm, 75 rpm.

16:00 - 18:00 Accumulate dir. drill sliding from 1463' to 1570', WOB 13 klbs, pres 2480 psi, 802 gpm.

18:00 - 19:30 Accumulate circulation and survey. Survey @ 1498 ft, incl 43.1 deg, azm 234.46 deg. Last pumped hi vis pill @ 1475 ft.

19:30 - 22:00 Accumulate dir. drill rotating from 1570' to 1758', WOB 15 klbs, pres 2530 psi, 800 gpm, 50 rpm.

22:00 - 23:00 Pump sweep pill and circ. a bottom up with 800 gpm and 2500 psi.

23:00 - 00:00 Accumulate dir. drill rotating from 1758' to 1814', WOB 15 klbs, pres 2530 psi, 800 gpm, 50 rpm.

March 08th, 2014

00:00 - 01:30 Accumulate dir. drill rotating from 1814' to 1892', WOB 15 klbs, pres 2530 psi, 800 gpm, 50 rpm.

01:30 - 04:30 Accumulate dir. drill sliding from 1892' to 2020', WOB 15 klbs, pres 2640 psi, 800 gpm.

04:30 - 07:00 Accumulate dir. drill rotating from 2020' to 2115', WOB 15 klbs, pres 2740 psi, 800 gpm, 60 rpm, TQ 2-3.

07:00 - 07:30 Circulate and take last survey @ 2044.7 ft, incl 63.4 deg, azm 231.2 deg.

07:30 - 09:00 Circulate, pump hi vis pill, and condition hole, MW 10.0 ppg.

09:00 - 12:00 Pooh directional BHA w/ 17" PDC bit from 2115 ft to 1082 ft with back reaming, over pull 40 klbs in some joints.

12:00 - 18:30	Continue pooh direccional BHA w/ 17" PDC bit from 1082' to surface'. L/D directional tools, MWD, mud motor and PDC bit.
18:30 - 22:30	M/U slick BHA w/ 17" tooth bit and 16 3/4" stabilizer, TIH from surface to 2115'.
22:30 - 00:00	Pump sweep pill and circ. two bottoms up with 800 gpm and 1830 psi.

March 09th, 2014

00:00 - 00:30	Cont. circ. with 800 gpm and 1830 psi, perform rice test: 17.55 in open hole average diameter.
00:30 - 06:00	POOH and LD slick BHA from 2115 ft to surface, circ. first seven stands.
06:00 - 06:30	Pepesa perform Rig Services to top drive.
06:30 - 07:30	Pepesa repair top drive hydraulic hoses.
07:30 - 09:00	ITS rig up hydraulic tongs, fill up tool, and position power unit on 3er level of platform.
09:00 - 09:30	Perform safety meeting with ITS and Pepesac crew.
09:30 - 12:00	Run 13 3/8" casing K-55, 54.5 lb/ft. Install 13 3/8" shoe guide, 1 csg joint w/ SR centralizer, float valve, and 13 3/8" csg string to 150 ft
12:00 - 15:30	Continue running 13 3/8" casing from 150' to 1590'. Tag @ 1590 ft.
15:30 - 16:30	Circulate bottom up with fill up tool to clean hole. shakers clean. 600 gpm, 290 psi.
16:30 - 20:00	Continue running 13 3/8" casing from 1590 ft to 1605', with circulation 590 gpm, 288 psi.
20:00 - 20:30	Make up next 13 3/8" CSG.
20:30 - 00:00	Fill up tool leak and ITS change new fill up tool, and cont. leak, Verified that 13 3/8" CSG has a ID: 12.8" and change, the right ID is 12.72", changed by another CSG.

March 10th, 2014

00:00 - 03:00	Cont. working UP and DOWN CSG with 800 gpm and 450 psi, CSG sit to 1625 ft and does not discharge weight.
03:00 - 05:30	LD last 13 3/8" CSG, ITS equipment and change Top Drive links.
05:30 - 08:30	RU Halliburton equipment and cement lines. Install cement head.
08:30 - 09:00	Circulate and observe return on shakers.
09:00 - 09:30	Perform safety meeting with Halliburton and Pepesac crew.
09:30 - 10:00	Test cement lines with 2150 psi, ok. Pump 50 bbls low rheology, Halliburton pump 20 bbls mud flush 8.4 ppg, 5.5 bpm, 310 psi. Pump 30 bbls Tuned Spacer, 11 ppg, 6 bpm, 390 psi.
10:00 - 10:30	Drop bottom plug, prepare and pump 168 bbls cemen EconoCem 13.5 ppg, 5.6 bpm, 560 psi; Pump 92 bbls HalCem 15.2 ppg, 5 bpm, 710 psi.
10:30 - 12:00	Drop top plug, displace cement with 247 bbls mud 10.1 ppg, 5/2 bpm. Observed no return last 21 bbls.
12:00 - 12:30	Top plug arrived to bottom with 370 psi and 247 bbls displacement. Perform casing test, increase pressure tu 1080 psi, ok. Back flow 1.5 bbls. Float valve work ok.
12:30 - 14:30	Disconnect cement lines, M/U and TIH 1 1/4" macaroni, tag @ 80 ft.
14:30 - 16:00	Pump 30 bbls cement, 15.8 ppg through annular. Return cement 14.7 ppg.
16:00 - 18:00	Observed gas flow with water between 18" cond & 13 3/8" csg. (8.4 ppg, PH 13, chlorides 18M ppm.). No possible to cut 18" conductor.
18:00 - 19:00	Flow decreases. Prepare Medomack cement lines to pump cement into annular from 2" valve on first level of platform.
19:00 - 20:30	Bad weather, Medomack vessel separates from Perla barcaza. Strong sea current. Annular under control, well no show gas, and fill annular with 2 bls of

mud.
20:30 - 00:00 R/D cmt lines. Pepesa welder open window on 18" csg, maneuver to center 13 3/8" csg, cut and weld ring between 18" conductor and 13 3/8" csg.

March 11th, 2014

00:00 - 03:00 Welder cut 13 3/8" csg and P/U. N/D bell nipple, 21 1/4" diverter, drilling spool, 21 1/4" flange with 18" extension.
03:00 - 05:00 Fepco technician bevel on 13 3/8" csg & condition to install 13 3/8" x 13 5/8" x 3M casing head. Perform slick lock test w/ 900 psi by 15 min - Ok
05:00 - 08:00 N/U 13-5/8"-3M extension, 13-5/8-3M x 13-5/8-5M DSA.
08:00 - 11:00 N/U 13 5/8"x5M double ram BOP Hydrill w/ 13 5/8"x5M annular preventer Hydrill.
11:00 - 13:00 Tighten bolts to 13 5/8" BOP. Installing bell nipple.
13:00 - 15:00 Install 5" pipe rams in 13 5/8" BOP. prepare hydraulic pump to perform 13 5/8" BOP test.
15:00 - 17:30 Pepesa welders center 13 5/8" BOP on second level of platform. Connect hydraulic hoses from BOP to Koomey, kill lines and choke lines.
17:30 - 18:30 Send ITS and SLB material from platform to Perla barge. M/U and install plug tester with 5" DP.
18:30 - 19:00 Test pipe rams with 300/3000 psi. ok
19:00 - 20:00 Pepesa test Hydrill annular with 300 psi, pressure no hold. Pepesa invest open/close annular hoses.
20:00 - 20:30 Rig service, lubricate Top drive.
20:30 - 23:00 Cont. pressure test BOP stack: blind rams, IBOP, stand pipe, choke manifold, lateral valves, HCR, with 300 psi/3000 psi x5 min Ok, and annular with 300 psi/1500 psi x 5 min Ok.
23:00 - 00:00 Pull out plug tester and install wear bushing.

March 12th, 2014

00:00 - 04:00 MU slick BHA with 12 1/4" tooth bit, 12 1/8" near bit STB, 6 1/2" DC, 5" HWDP and 5" DP from surface to 1575 ft, tag TOC to 1575 ft.
04:00 - 07:30 DOC, two plugs, float collar and cement from 1575 ft to 1625 ft with 650 gpm and 60 rpm.
07:30 - 08:00 Drill out shoe at 1625 ft, clean formation from 1625 ft to 1635 ft with 750 gpm, 20 rpm. Geology confirm 100% formation cutting.
08:00 - 09:00 Displace contaminate mud for new mud 10.3 ppg. and circulate to homogenize mud fluid. Savia Production send SPC slickline unit, received on platform and position on 2nd level of platform.
09:00 - 12:00 Clean 17" well section with 12 1/4" tricone bit from 1635 ft to 1700 ft. 770/800 gpm, pres 1250 psi, 45 rpm. Observed restriction and high torque at 1684 ft, 1689 ft, 1699 ft. Work up/down.
12:00 - 14:30 Continue cleaning 17" well section with 12 1/4" tricone bit from 1700 ft to 2115 ft. no restriction. Mud weight 10.3 ppg.
14:30 - 15:00 Pump 45 bbls hi vis pill 110 sec/qt. Circulate.
15:00 - 16:00 Perform wiper trip. pull out from 2115' to 1625'. and Trip back to bottom to 2115'. Show restriction at 1685' and 1700 ft.
16:00 - 16:30 Circulate, shaker clean, ok. MW: 10.3 ppg.
16:30 - 21:00 Pull slick BHA with 12 1/4" tooth bit from 2115' to surface. L/D stabilizer and 12 1/4" tooth bit.
21:00 - 00:00 MU directional BHA with 12 1/4" PDC bit(Type:U419S-A1,S/N:23662,jets:6x14), power drive, 12 1/8" STB, Rigid mount w/slim pulse, 8" DC, 5" HWDP from

surface to 305 ft.

March 13th, 2014

00:00 - 02:30	Cont. RIH directional BHA from 305 ft to 1550 ft.
02:30 - 03:30	Slip 90 ft and cut off drilling line.
03:30 - 04:00	Pepesa change saver sub.
04:00 - 04:30	Cont. RIH from 1550 ft to 2115 ft, RIH with circ. with 800 gpm and 2380 psi.
04:30 - 05:00	Circ. and cond. hole with 800 gpm and 2380 psi.
05:00 - 06:00	Rotate drill from 2115 ft to 2200 ft with WOB 10-15 klb, 800 gpm, 2400 psi, 100 rpm and TQ 3-4 kft-lb
06:00 - 09:30	Rotate drill from 2200 ft to 2487 ft. WOB 15 klbs, 805 gpm, 2509 psi, 100 rpm and TQ 4 kft-lb.
09:30 - 10:00	Circulate and take survey.
10:00 - 10:30	Pump hi vis pill, circulate bottom up, ok.
10:30 - 15:00	Rotate drill from 2487 ft to 2867 ft
15:00 - 16:00	Pump hi vis pill, circulate two bottoms up.
16:00 - 18:00	POOH directional BHA from 2867 ft to 1800 ft with circ.
18:00 - 19:00	Circ. with 800 gpm and 2360 psi.
19:00 - 19:30	POOH directional BHA from 1800 ft to 1550 ft.
19:30 - 20:00	Circ. a bottom up with 800 gpm and 2360 psi.
20:00 - 23:00	TIH directional BHA from 1550 ft to 2867 ft.
23:00 - 00:00	Pump sweep pill and circ. two bottoms up with 800 gpm and 2700 psi.

March 14th, 2014

00:00 - 01:30	Rotate drill from 2867 ft to 2968 ft. WOB 15 klbs, 800 gpm, 2700 psi, 100 rpm and TQ 4 kft-lb.
01:30 - 02:00	Rig service, lubricate top drive.
02:00 - 13:30	Rotate drill from 2968 ft to 3717 ft. WOB 15 klbs, 800 gpm, 2700 psi, 110 rpm and TQ 4-5 kft-lb.
13:30 - 15:00	Pump hi viscous pill and circ. two bottoms up with 800 gpm and 2700 psi.
15:00 - 20:00	Perform wiper trip from 3717 ft to 1550 ft, circ. a bottom up to 2600 ft.
20:00 - 20:30	Circ. a bottom up to 1550 ft.
20:30 - 00:00	TIH directional BHA from 1550 ft to 3154 ft.

March 15th, 2014

00:00 - 02:00	TIH directional BHA from 3154 ft to 3717 ft.
02:00 - 03:00	Pump sweep pill and circ. a bottom up with 800 gpm and 2700 psi.
03:00 - 08:30	Rotate drill from 3717 ft to 4000 ft. WOB 15 klbs, 800 gpm, 3000 psi, 110 rpm and TQ 4-5 kft-lb.
08:30 - 10:00	Pump sweep pill and circ. a bottom up with 800 gpm and 2950 psi.
10:00 - 15:30	Rotate drill from 4000 ft to 4285 ft. WOB 15 klbs, 790 gpm, 3000 psi, 100 rpm and TQ 4-5 kft-lb.
15:30 - 16:30	Pump sweep pill and circ. a bottom up with 790 gpm and 3000 psi.
16:30 - 21:30	Rotate drill from 4285 ft to 4569 ft. WOB 15 klbs, 780 gpm, 3150 psi, 100 rpm and TQ 4-5 kft-lb.
21:30 - 00:00	Pump sweep pill and circ. a bottom up with 780 gpm and 3000 psi.

March 16th, 2014

00:00 - 01:30	Perform wiper trip from 4569 ft to 3626 ft.
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01:30 - 02:30	Circ. a bottom up with 800 gpm & 3200 psi.
02:30 - 05:00	Cont. POOH from 3626 ft to 2440 ft.
05:00 - 06:00	Circ. a bottom up with 750 gpm & 2500 psi, a lot of debris on shakers, circ. until to clean shakers.
06:00 - 07:30	Cont. POOH from 2440 ft to 1600 ft. with circ.
07:30 - 08:00	Circ. a bottom up with 800 gpm and 2500 psi.
08:00 - 09:00	TIH directional BHA from 1600 ft to 2200 ft.
09:00 - 10:00	Circ. with 800 gpm and 2650 psi, a lot of debris on shakers.
10:00 - 14:00	Cont. TIH directional BHA from 2200 ft to 4000 ft.
14:00 - 15:00	Circ. a bottom up with 800 gpm and 3100 psi.
15:00 - 15:30	Cont. TIH directional BHA from 4000 ft to 4150 ft., observed leak on rotary hose between stand pipe to Top Drive.
15:30 - 19:00	POOH directional BHA from 4150 ft to 1550 ft with out problems.
19:00 - 00:00	Rig repair, Pepesa crew change rotary hose between stand pipe to Top Drive, rotary hose has a leak.

March 17th, 2014

00:00 - 04:00	Rig repair, Pepesa crew Cont. change rotary hose between stand pipe to Top Drive, rotary hose has a leak.
04:00 - 07:00	TIH directional BHA from 1550 ft to 3191 ft.
07:00 - 08:00	Circ. a bottom up with 800 gpm and 3020 psi.
08:00 - 10:00	Cont. TIH directional BHA from 1550 ft to 4100 ft.
10:00 - 11:00	Cont. TIH directional BHA from 4100 ft to 4200 ft
11:00 - 11:30	Rig service, lubricate Top Drive and check mud pumps.
11:30 - 12:30	Circ. hole and additive - Carbonox is added to the mud to reduce foam.
12:30 - 16:00	Cont. TIH directional BHA from 4200 ft to 4569 ft, wash and ream with 100 rpm, 800 gpm and 3270 psi.
16:00 - 17:00	Rig repair, circ. holw with 720 gpm and 2650 psi, meanwhile Pepesa crew repair a piston of Mud pump 1 and repair a seat of Mud pump 2.
17:00 - 00:00	Rotate drill from 4569 ft to 4946 ft. WOB 15 klbs, 790 gpm, 3250 psi, 100 rpm and TQ 4-5 kft-lb.

March 18th, 2014

00:00 - 03:00	Rotate drill from 4946 ft to 5115 ft. WOB 18-20 klbs, 790 gpm, 3450 psi, 100 rpm and TQ 8-11 kft-lb.
03:00 - 04:00	Pump sweep pill and circ. a bottom up with 800 gpm & 3460 psi.
04:00 - 07:30	Rotate drill from 5115 ft to 5419 ft. WOB 18-20 klbs, 800 gpm, 3530 psi, 100 rpm and TQ 9-11 kft-lb.
07:30 - 08:30	Pump sweep pill and circ. a bottom up with 800 gpm & 3500 psi.
08:30 - 14:00	Rotate drill from 5419 ft to 5675 ft. WOB 18-20 klbs, 790 gpm, 3510 psi, 100 rpm and TQ 9-11 kft-lb.
14:00 - 16:00	Pump sweep pill and circ. two bottoms up with 790 gpm & 3500 psi.
16:00 - 00:00	POOH directional BHA from 5675 ft to 4390 ft, with back reaming.

March 19th, 2014

00:00 - 11:30	Cont. POOH directional BHA from 4390 ft to 2500 ft, with back reaming, 800 gpm, 90 rpm, TQ 10-13, PP 2650 psi. Increase mud weight from 11.1 ppg to 11.3 ppg.
11:30 - 12:30	Circ. A bottom up, a lot of cuttings on shakers.
12:30 - 14:00	Cont. POOH directional BHA from 2500 ft to 1850 ft, with back reaming, 800

gpm, 90 rpm, TQ 8-10, PP 2550 psi.
 14:00 - 14:30 Circ. A bottom up, a lot of cuttings on shakers.
 14:30 - 19:30 Cont. POOH directional BHA from 1850 ft to surface and LD directional BHA.
 19:30 - 00:00 MU slick BHA with 12 1/4" tooth bit, 12 1/8" STB, 8" DC, 2x6 1/2" DC, 6x5" HWDP, Hydro Jar, 18x5" HWDP and 5" DP from surface to 1900 ft.

March 20th, 2014

00:00 - 07:00 Cont. TIH slick BHA from 1900 ft to 3600 ft, with circ. and rotation.
 07:00 - 08:00 Pump sweep pill and circ. A bottom up with 830 gpm and 2300 psi.
 08:00 - 19:00 Cont. TIH slick BHA from 3900 ft to 5675 ft, with circ. and rotation.
 19:00 - 20:30 Pump a pill of low reology and a pill of high weight, circ a bottom up.
 20:30 - 00:00 Cont. POOH slick BHA from 5675 ft to 4336 ft, with back reaming 800 gpm, 2200 psi, 80 rpm and TQ 8-10 kft-lbs.

March 21st, 2014

00:00 - 00:30 Cont. POOH slick BHA from 4336 ft to 3600 ft, with back reaming 800 gpm, 2200 psi, 80 rpm and TQ 8-10 kft-lbs.
 00:30 - 01:30 Pump sweep pill and circ. a bottom up with 800 gpm and 2170 psi.
 01:30 - 04:00 Cont. POOH slick BHA from 3600 ft to 1600 ft, with back reaming 800 gpm, 1700 psi, 80 rpm and TQ 5-7 kft-lbs.
 04:00 - 04:30 Circ. a bottom up with 800 gpm and 1550 psi.
 04:30 - 10:00 TIH slick BHA from 1550 ft to 3600 ft with circ.
 10:00 - 10:30 Circ. a bottom up with 800 gpm and 2400 psi.
 10:30 - 13:00 Cont. TIH slick BHA from 3600 ft to 5675 ft with circ. And rotation.
 13:00 - 15:00 Pump sweep pill and Circ. hole with 800 gpm and 2700 psi.
 15:00 - 19:00 POOH slick BHA from 5675 ft to 3600 ft with circ. and rotation.
 19:00 - 19:30 Circ. hole a bottom up.
 19:30 - 22:00 Cont. POOH slick BHA from 3600 ft to surface and LD slick BHA.
 22:00 - 22:30 Pull out wear bushing.
 22:30 - 00:00 RU ITS equipment on rig floor to run 9 5/8" CSG.

March 22nd, 2014

00:00 - 00:30 Perform safety meeting with all personnel.
 00:30 - 11:00 Run 9-5/8" casing 43.5#, N80 & BTC (Shoe track: Shoe, 02ea joint, float collar) and continue to run 9-5/8" csg from surface to 4454 ft. Fill each 5ea casing. run with out circ.
 11:00 - 15:00 Cont. Run 9 5/8" CSG from 4454 ft to 5141 ft, with circ.
 15:00 - 19:00 Center BOP and 13 5/8" CSG head, repaired and connected sleeve of flow line, weld 1" plate on first level to secure the box of this well.
 19:00 - 21:00 Cont. Run 9 5/8" CSG from 5141 ft to 5673 ft. with circ.
 21:00 - 00:00 Circ. to 5673 ft with 700 gpm and 590 psi, meanwhile Halliburton Rig Up lines.

March 23rd, 2014

00:00 - 02:30 Rig up cement lines and install cement head, lateral valves and connection. R/D spider slip and fill up tool from ITS.
 02:30 - 03:00 Safety meeting prior cement job with all companies.
 03:00 - 08:00 PT lines w/2100psi Ok. Rig pump 60 bbls of mud low reology, pump 20 bbl- 8.4ppg of mud flush III, 40 bbls- 12.5ppg of Tuned Spacer III, Drop bottom plug, 422 bbl-13.5ppg Gas Stop Cem V, 47 bbl-15.2ppg of Hal

	Cem V. Drop top plug, displace with mud 418 bbls-11.6 ppg. Final press to 500 psi. back flow 2.5 bbls, pressure CSg with 1500 ps
08:00 - 10:00	Rig down Halliburton cement head and lines.
10:00 - 10:30	Maneuver and lift BOP stack 13 5/8".
10:30 - 11:00	Install casing hanger 9 5/8".
11:00 - 11:30	R/D cement head, cut and L/D landing joint casing 9 5/8".
11:30 - 13:30	N/D BOP stack 13 5/8", riser spool 13 5/8".
13:30 - 14:30	Bevel 9 5/8" casing and install casing head spool 13-5/8"x3M 11"x3M Psi.
14:30 - 15:00	Test casing head spool 13-5/8"x3M -11"x3M with 1900 psi x 10 min, Ok.
15:00 - 21:00	N/U riser spool, DSA 13 5/8" and BOP stack 13 5/8". N/U choke and kill line, bell nipple and flow line.
21:00 - 21:30	Install plug tester with DP5".
21:30 - 22:00	Lubricate Top Drive.
22:30 - 00:00	Pressure test blind rams, pipe ram, choke & kill lines Valves, stand pipe manifold with 300/3000 psi, ok.

March 24th, 2014

00:00 - 01:30	Cont. Pressure test annular with 300/1500 psi, ok. Choke Manifold test pressure 300/3000 psi.
01:30 - 02:00	Retrieve plug tester with DP5".
02:00 - 03:00	Install Hawk Jaw, condition rig floor, install wear bushing.
03:00 - 11:30	MU directional BHA and 8 1/2" PDC bit(Halliburton,type: FX-56, SN: 12392701), power drive, 8 3/8" STB and 5" DP from surface to 4500 ft.
11:30 - 12:30	Pepesa cut off drilling line 130 ft.
12:30 - 13:00	Rig service, lubricate Top Drive.
13:00 - 14:00	Cont. TIH directional BHA from 4500 ft to 5583 ft, Tag top of cement to 5583 ft.
14:00 - 15:00	DOC, plugs, float collar from 5583 ft to 5610 ft.
15:00 - 15:30	Pressure casing test with 1000 psi x 10 min Ok.
15:30 - 16:00	Cont. DOC and CSG shoe from 5610 ft to 5675 ft.
16:00 - 16:30	Drilling from 5675 ft to 5690 ft with 450 gpm, 80 rpm, PP 1650 psi and TQ 11-13 kft-lb.
16:30 - 17:00	Circ. a bottom up and sample was 100% formation.
17:00 - 18:30	Prepare mud with 10.9 ppg.
18:30 - 19:30	Displace mud with 11.5 ppg by new mud with 10.9 ppg.
19:30 - 20:00	Clean sand tramp.
20:00 - 21:00	Circ. with new mud two bottoms up with 470 gpm and 1800 psi, mud weight in/out 10.9 ppg
21:00 - 21:30	Perform formation integrity test with 600 psi. EMW: 14.5 ppg and MW: 10.9 ppg,
21:30 - 23:30	Directional drill from 5690 ft to 5736 ft with WOB 10, 500 gpm, 90 rpm, PP 1920 psi, TQ 12 kft-lb.
23:30 - 00:00	Circ. a bottom up with 500 gpm and 1900 psi, take Low pressure.

March 25th, 2014

00:00 - 07:00	Directional drill from 5736 ft to 6144 ft with WOB 10, 550 gpm, 90 rpm, PP 2480 psi, TQ 12 kft-lb.
07:00 - 08:00	Pump sweep pill with calcium carbonate and circ. with 550 gpm and 2430 psi.
08:00 - 13:00	Directional drill from 6144 ft to 6426 ft with WOB 16, 550 gpm, 100 rpm, PP 2580 psi, TQ 14 kft-lb.
13:00 - 14:00	Pump sweep pill with calcium carbonate and circ. with 550 gpm and 2600 psi.
14:00 - 15:00	Perform wiper trip from 6426 ft to 5637 ft
15:00 - 15:30	Circ. a bottom up.

15:30 - 16:30	TIH directional BHA from 5637 ft to 6426 ft.
16:30 - 22:30	Directional drill from 6426 ft to 6812 ft with WOB 16, 550 gpm, 100 rpm, PP 2690 psi, TQ 15 kft-lb.
22:30 - 00:00	Pump sweep pill with calcium carbonate and circ. with 550 gpm and 2550 psi.

March 26th, 2014

00:00 - 06:00	Directional drill from 6812 ft to 7186 ft with WOB 16, 550 gpm, 100 rpm, PP 2780 psi, TQ 14 kft-lb.
06:00 - 07:00	Pump sweep pill with calcium carbonate and circ. with 550 gpm and 2750 psi.
07:00 - 09:30	Perform wiper trip from 7186 to 5643 ft, with circ. first four stand.
09:30 - 10:00	circ. a bottom up.
10:00 - 11:00	TIH directional BHA from 5643 ft to 7186 ft without problems.
11:00 - 19:00	Directional drill from 7186 ft to 7565 ft with WOB 20-22, 550 gpm, 100 rpm, PP 2800 psi, TQ 15 kft-lb.
19:00 - 21:00	Pump sweep pill with calcium carbonate and circ. with 550 gpm and 2750 psi.
21:00 - 00:00	Directional drill from 7565 ft to 7755 ft with WOB 20-22, 550 gpm, 100 rpm, PP 2800 psi, TQ 15 kft-lb.

March 27th, 2014

00:00 - 06:00	Directional drill from 7755 ft to 8040 ft with WOB 20-22, 550 gpm, 100 rpm, PP 2800 psi, TQ 15 kft-lb.
06:00 - 10:00	Directional drill from 8040 ft to 8198 ft w/ WOB 20-22, 530 gpm, 100 rpm, PP 2660 psi, TQ 17 kft-lb. MW:11.2ppg.
10:00 - 12:00	Circulate hole and pump 30 bbls visc- pill to shaker clean with 550 gpm - 2700 psi. Last survey at 8198 ft - 52.30° incl - 230.10° azm. Last geolgy sample at 8198 ft, 70 % clsy, 20% slyt, 10 %sandst.
12:00 - 20:00	POOH directional BHA from 8198 ft to surface without problem. TD final : 8198 ft . POOH bha to lay down.
20:00 - 00:00	MU & RIH 8.5" slick bha from surface to 4100 ft.

March 28th, 2014

00:00 - 03:00	Continue RIH with 8.5" slick BHA from 4100 ft to 8198 ft without problems.
03:00 - 05:30	Circulate and pump 30 bbls vis-pill to shaker clean, and condition mud to logging.
05:30 - 12:00	POOH 8.5" slick BHA from 8198 ft to surface without problems.
12:00 - 13:00	WTF rig up WTF compact well shuttle.
13:00 - 13:30	Safety meeting with all crew.
13:30 - 16:30	M/U Shuttle compact tool of weatherford (logging tool) to 206 ft. Shuttle compact tool (BHA): 206 ft - Max OD: 4 3/4".
16:30 - 00:00	Continue RIH shuttle compact tool from 206 to 6695 ft with 5" dp without problem.

March 29th, 2014

00:00 - 01:30	Continue RIH shuttle compact tool from 6695 to 8198 ft with 5" dp without problem.
01:00 - 03:00	POOH from 8198 ft to 8034 ft (164 ft), circulate & send messenger dart for deployment tool logging string with 156 gln - 200 psi.
03:00 - 06:00	POOH logging from 8034 ft to 5525 ft, velocity 30 ft/min , gamma ray , resistivity

, porosity, density, caliper, neutron.

06:00 - 09:30 Continue POOH shuttle with 5 " dp from 5525 ft to 206 ft.

09:30 - 12:00 Rig down WTF shuttle compact tool from 206 ft to surface.

12:00 - 13:30 Recovery wear bushing and prepare rig floor to RIH 5.5" csg.

13:30 - 14:30 ITS service rig up hydr tong and toos to RIH csg.

14:30 - 15:00 Safety meeting with ITS, Pepesa and Tramarsa previous to RIH 5.5" csg.

15:00 - 00:00 M/U Guide Shoe + 2 joints 5 ½" 17.0 ppf N-80 BTC casing+ float collar and continue RIH 5 1/2" csg from 75.02 ft to 5550 ft.

March 30th, 2014

00:00 - 01:00 Rig up fill up tool and spider of ITS , Circulate w/ 250 gls - 300 psi.

00:10 - 05:00 Continue RIH 5.5" csg from 5550 ft to 8198 ft without problems.

05:00 - 10:00 5.5" csg at 8198 ft .Circulate hole with 400 gpm - 565 psi. Total csg 221 csg + 3 pup joint. FC: 8123 FT.

Halliburton Medomak Cementing ship arrived to location at 07:00 am. Rig up cementing line.

Halliburton crew prepare mixer and cement on ship

10:00 - 12:00 Lay down ITS fill up tool and equipment, Installed savia circulation head and continue circulation with 400 - 565 psi.

Halliburton crew prepare mixer and cement on ship

12:00 - 12:30 Installed Halliburton cementing head and continue circulation 400 gpm - 550 psi.

Perform safety meeting with all crew previos to cementing job.

12:30 - 16:00 Star Cementing job. Pressure Test cementin line with 3000 psi. Ok.

Pump 20 bbls Mud flush III (8.40 ppg) and 40 bbls Gel flush (12.50 ppg),Drop bottom plug.

Mixs cement & pump 172 bbl of cmt Gas stop cemen V 15.2 PPG and observed by shakers full return.

Drop top plug & displace w/ 190 bbl of mud 11.2 ppg, (theory volume : 190 bbls) perform bump plug from 657 psi to 1570 psi by 5 min and perform integrity test 5.5" csg Ok.

Perform back flow 1.0 bbl, ok.Csg shoe: 8198 ft, Float Collar: 8123 ft. Total cement used 750 sxs (Pacasmayo V).

16:00 - 18:00 Perform Top job between 18" conductor & 13 3/8" csg.

Pump 6 bbls of water (8.4 ppg) to 1 bpm - 140 psi. Bleed off pressure.

Mix cement and pump 10 bbls cement Halcem I (16 ppg), 0.9 bpm - 280 psiok. stop pumping and close annular - ok.

WOC while L/D cement lines and Pepesa untight riser bolts

18:00 - 00:00 LD flow line, lift 13 5/8" BOP stack, set casing hanger(slips) with 120 klb ok. Cut & retrieve 5.5" landing joint. N/D BOP 13 5/8" X 5M, drilling spool 13 5/8" x 5M,riser 13 5/8" x 5M.

Pepesa welder cut & bevel 5.5" casing & install tubing spool (section "c"),tighten bolts. Perform section "c" test, R54 ring gasket and pack off w/ 500 psi & 2700 psi by 10 min, ok.

CONCLUSIONS AND RECOMMENDATIONS

- The **LO6-30D**, is a development well, and was drilled in four phases until final depth 8198 feet MD; 4491.90 feet TVD.
- During 8.5" phase, it was used mud CLAY SEAL PLUS type with mud weight between 10.9 ppg and 11.2 ppg.
- The last survey took was at 8150.80 feet MD, 4463.0 feet TVD with 52.26° of inclination and 230.04 degrees azimuth.
- The reservoir Rio Bravo top structurally was found at 5816.00 ft MD (RT), 3293.5 ft. TVD (RT), at 238 ft. more upper structurally in (TVD).
- Maximum gas formation peak was 506.0 units in Rio Bravo formation.
- In formations where gas readings are high recommended circulate well and not make the connection of pipe to gas decrease, also check the weight of the mud, if necessary increase the mud weight not exceeding ECD.
- 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.