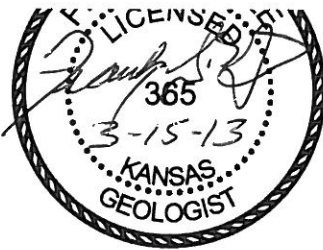


GEOLOGICAL REPORT DRILLING TIME & SAMPLE LOG

REPORT PREPARED BY FRANK S. MIZE/GEOLOGIST



API#: 15-151-26,468

COMPANY Trans Pacific Oil Corp.
 LEASE Leiker #9-18
 FIELD Wheatland
 LOCATION 990' FNL & 2970' FEL
 SEC 18 TWSP 15S RGE 17W
 COUNTY Ellis STATE Kansas

ELEVATION
 K.B. 1987
 D.F. _____
 G.L. 1982
 DEPTH MEASURED FROM KB
 Log _____ Drilling

CONTRACTOR Shields Drilling
 SPUD 3-4-13 COMP 3-13-13
 SAMPLES SAVED FROM 2800' TO RTD

CASING
 Surface 8 5/8", 23# @ 1152' w/450sx
 Production 5 1/2", 14# @ 3701' w/155 sx
 Electric Logs
 RAG/SONIC

- SHALE
- SANDSTON
- LIMESTONE
- DOLOMITE
- HALITE
- ANHYDRITE/K
- GRANITE

Anhydrite 1136 +851

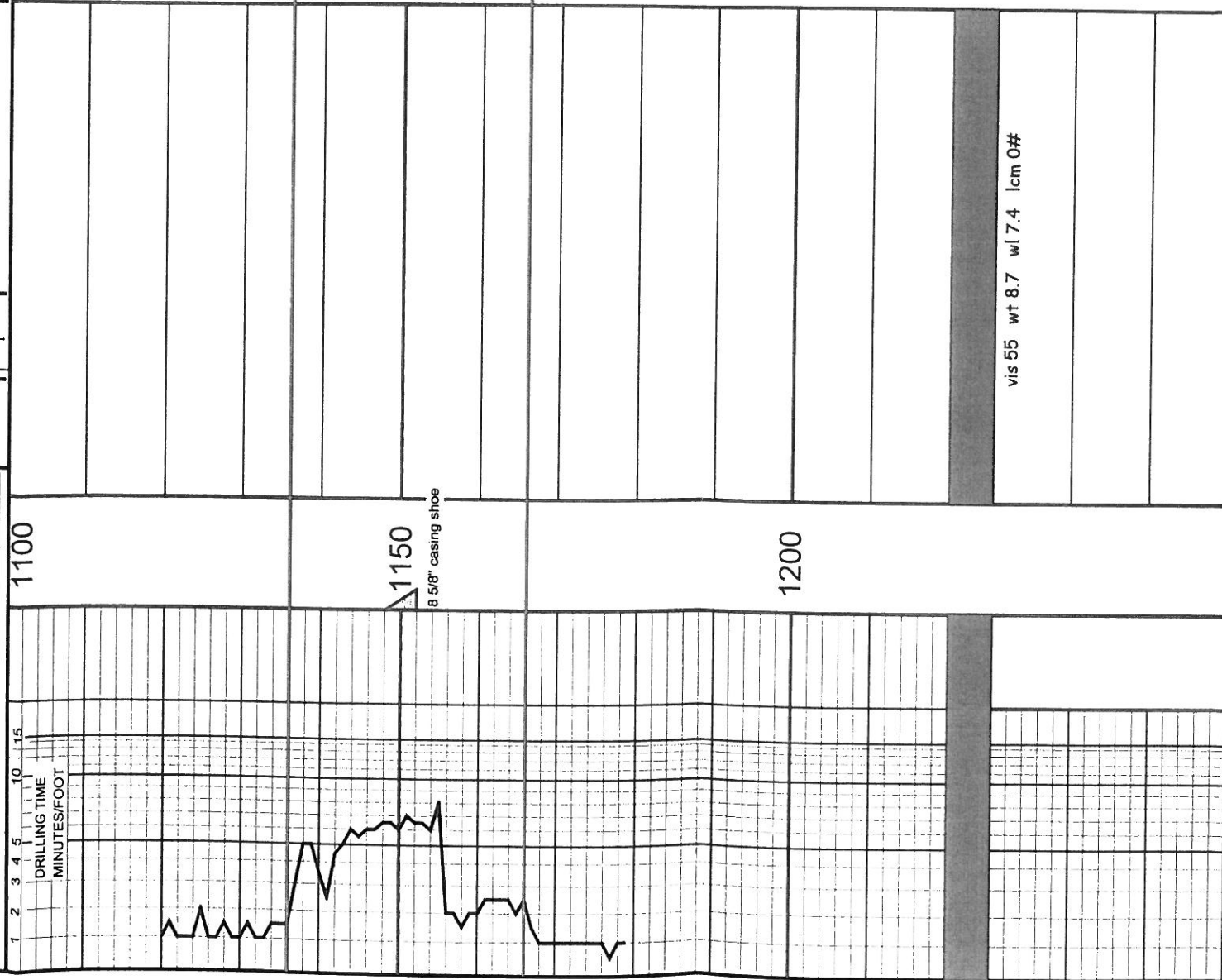
B Anhydrite 1166 +82

FORMATION	SAMPLE	E LOG	DATUM
Anhydrite	1136	1136	+851
B Anh	1166	1176	+811
Topeka	2957	2957	-970
King Hill	3076	3076	-1089
Queen Hill	3138	3138	-1151
Heebner	3222	3223	-1236
Toronto	3246	3245	-1258
Lansing	3274	3275	-1288
BKC	3502	3504	-1517
Arbuckle	3641	3642	-1655
Granite	3863	3864	-1877
RTD	3867	3868	-1881

A. elog	B. elog	C. elog
+855	+849	+841
+812	+807	+807
-972	-981	-978
-1089	-1099	-1096
-1149	-1159	-1158
-1234	-1245	-1244
-1254	-1265	-1266
-1285	-1295	-1297
-1512	-1527	-1512
-1554	-1619	-1601
-1637	-1635	-1632

REFERENCE WELLS

- 1. C NE SE NW 18-15S-17W, Kenway Services, Leiker #6
- 3. C NW SW NE 18-15S-17W, Allen Oil Co, Gross #1-18
- 2. C SE NW NW 18-15S-17W, Kenway Services, Leiker #5



vis 55 wt 8.7 w/ 7.4 lcm 0#

vis 55 wt 8.7 wl 7.4 lcm 0#

2800

2850

2900

2950

3000

Limestone: beige to gray, medium to coarsely crystalline, some dense, some with fair intercrystalline porosity, no show, fossiliferous, some argillaceous

Shale: gray to dark gray

Limestone: beige to tan, dense, no visible porosity, no show

Shale: gray to dark gray

Limestone: beige to tan, dense, no visible porosity, no show

Shale: gray to dark gray

Shale: gray to dark gray

Limestone: beige to brown, fine to medium crystalline, fair intercrystalline porosity, no show

Shale: gray to dark gray

Limestone: beige to brown, fine to medium crystalline, fair intercrystalline porosity, no show
Shale: gray to dark gray
Limestone: beige to brown, fine crystalline, slightly argillaceous, no show

Shale: gray to dark gray

Limestone: brown, fine crystalline, poor intercrystalline porosity, trace spotted glauconitic stain, no show free oil
Shale: gray to dark gray

Shale: gray to dark gray

Limestone: gray to brown, micritic, dense

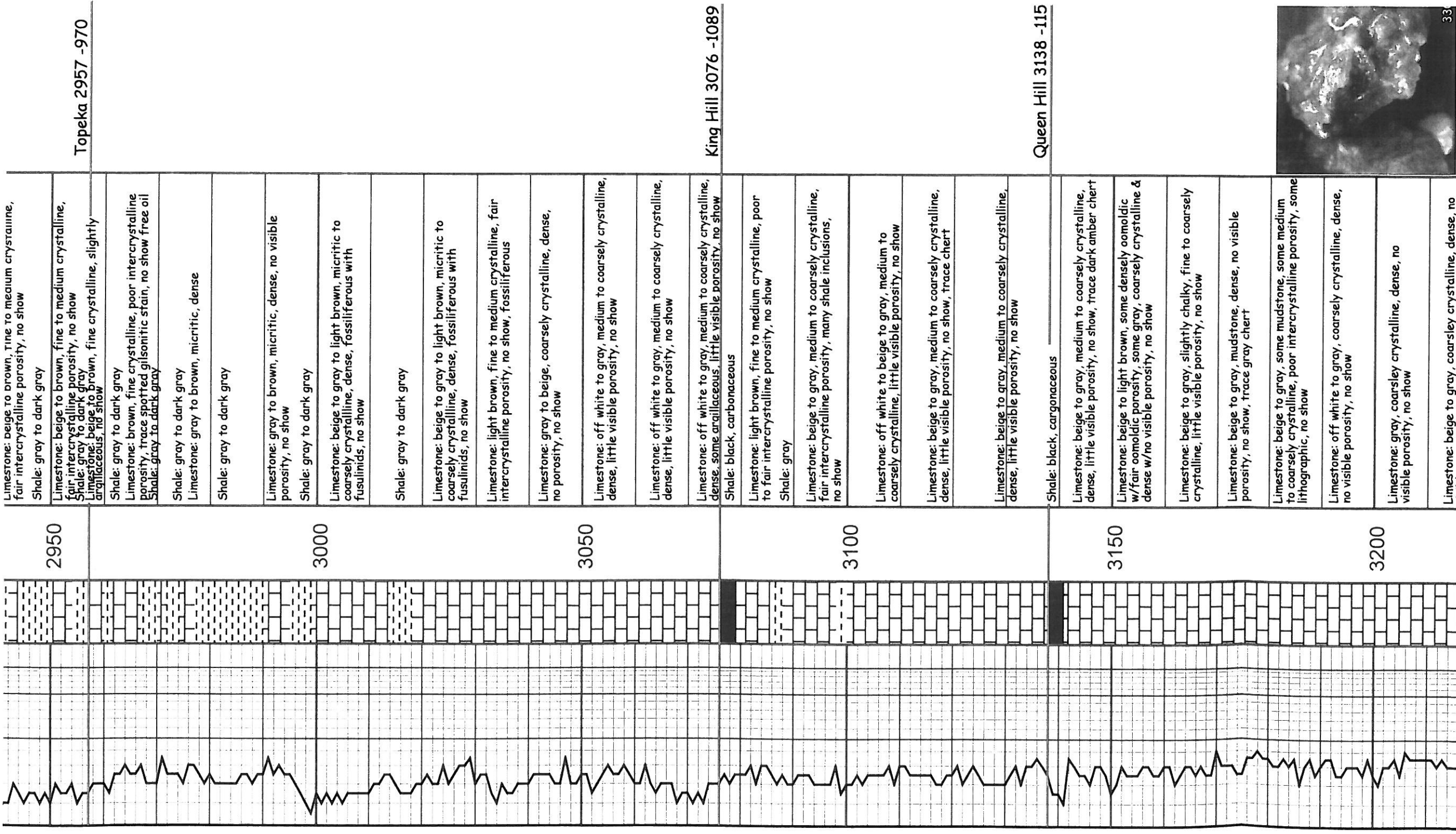
Shale: gray to dark gray

Limestone: gray to brown, micritic, dense, no visible porosity, no show

Shale: gray to dark gray

Limestone: beige to gray to light brown, micritic to coarsely crystalline, dense, fossiliferous with fusulinids, no show

Topeka 2957 -970



Topeka 2957 -970

King Hill 3076 -1089

Queen Hill 3138 -115

2950

3000

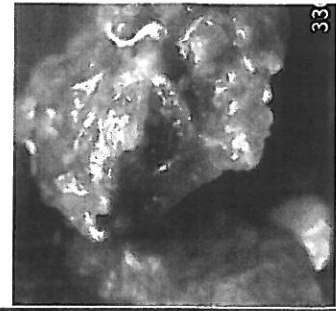
3050

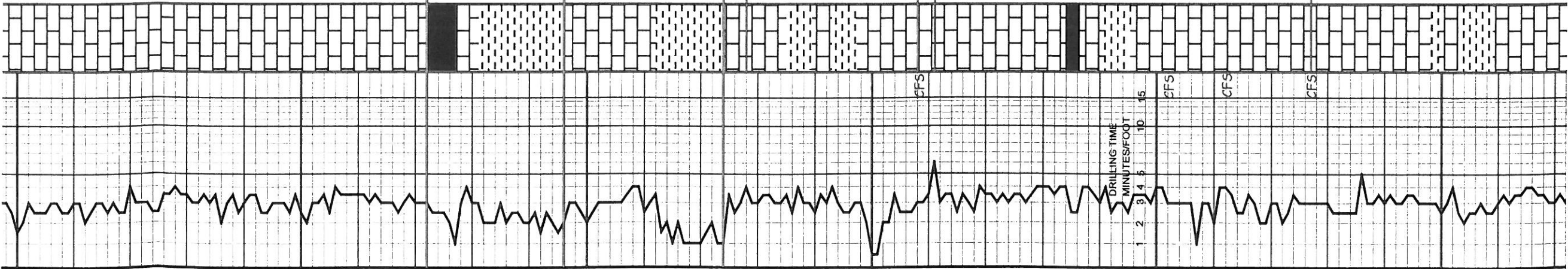
3100

3150

3200

Limestone: beige to brown, fine to medium crystalline, fair intercrystalline porosity, no show Shale: gray to dark gray	Limestone: beige to brown, fine to medium crystalline, fair intercrystalline porosity, no show Shale: gray to dark gray	Limestone: brown, fine crystalline, poor intercrystalline porosity, trace spotted glauconitic stain, no show free oil Shale: gray to dark gray	Limestone: gray to brown, micritic, dense, no visible porosity, no show Shale: gray to dark gray	Limestone: beige to gray to light brown, micritic to coarsely crystalline, dense, fossiliferous with fusulinids, no show Shale: gray to dark gray	Limestone: light brown, fine to medium crystalline, fair intercrystalline porosity, no show, fossiliferous	Limestone: gray to beige, coarsely crystalline, dense, no porosity, no show	Limestone: off white to gray, medium to coarsely crystalline, dense, little visible porosity, no show	Limestone: off white to gray, medium to coarsely crystalline, dense, little visible porosity, no show	Limestone: off white to gray, medium to coarsely crystalline, dense, some argillaceous, little visible porosity, no show Shale: black, carbonaceous	Limestone: light brown, fine to medium crystalline, poor to fair intercrystalline porosity, no show Shale: gray	Limestone: beige to gray, medium to coarsely crystalline, fair intercrystalline porosity, many shale inclusions, no show	Limestone: off white to beige to gray, medium to coarsely crystalline, little visible porosity, no show	Limestone: beige to gray, medium to coarsely crystalline, dense, little visible porosity, no show, trace dark amber chert	Limestone: beige to light brown, some densely oomoldic w/fair oomoldic porosity, some gray, coarsely crystalline & dense w/no visible porosity, no show	Limestone: beige to gray, slightly chalky, fine to coarsely crystalline, little visible porosity, no show	Limestone: beige to gray, mudstone, dense, no visible porosity, no show, trace gray chert	Limestone: beige to gray, some mudstone, some medium to coarsely crystalline, poor intercrystalline porosity, some lithographic, no show	Limestone: off white to gray, coarsely crystalline, dense, no visible porosity, no show	Limestone: gray, coarsely crystalline, dense, no visible porosity, no show	Limestone: beige to gray, coarsely crystalline, dense, no visible porosity, no show
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3150

Limestone: beige to light brown, some densely oomoldic w/fair oomoldic porosity, some gray, coarsely crystalline & dense w/no visible porosity, no show

Limestone: beige to gray, slightly chalky, fine to coarsely crystalline, little visible porosity, no show

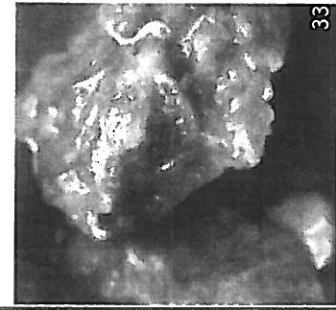
Limestone: beige to gray, mudstone, dense, no visible porosity, no show, trace gray chert

Limestone: beige to gray, some mudstone, some medium to coarsely crystalline, poor intercrystalline porosity, some lithographic, no show

Limestone: off white to gray, coarsely crystalline, dense, no visible porosity, no show

Limestone: gray, coarsely crystalline, dense, no visible porosity, no show

Limestone: beige to gray, coarsely crystalline, dense, no visible porosity, no show



3200

Shale: black, carbonaceous

Limestone: beige to gray, coarsely crystalline, dense, no porosity, no show

Shale: gray to greenish gray, calcareous

Heebner 3222 -1235

3250

Limestone: mottled off white to light brown, fine to medium crystalline, poor intercrystalline porosity, spotted gilsonitic stain, no show free oil, no odor

Shale: gray to black, trace red

Toronto 3246 -1259

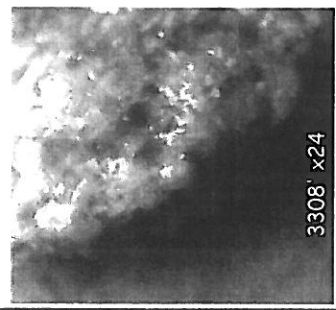
See DST Results Below

Limestone: off white to gray, medium to coarsely crystalline, little visible porosity, no show

Lansing 3274 -1287

#1

Limestone: gray to light brown, fine to medium crystalline very poor intercrystalline porosity, very slight show free oil in two rocks, no odor, pale gold fluorescence in less than 3% sample



3300

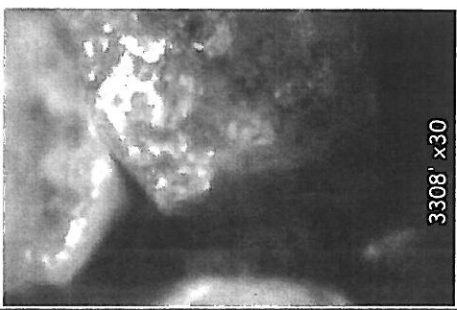
Limestone: light beige, fine to medium crystalline, poor to fair intercrystalline & trace vuggy porosity, fair show free oil, faint odor, fair odor on break, pale gold fluorescence in 25% of 0" and 20% of 15" sample

Limestone: off white to gray, densely oolitic, oolitic, little visible porosity, no show in 60" sample vis 58 wt 9.0 wl 6.8 lcm 0#

Limestone: beige to gray, most coarsely crystalline, dense, some oomoldic w/fair oomoldic porosity, no show

#2

Limestone: beige to gray, most coarsely crystalline, dense, some oomoldic w/fair oomoldic porosity, one rock w/fair intercrystalline porosity and spotted show free oil, pale gold fluorescence in >1% sample



3350

Limestone: off white, coarsely crystalline, dense, little visible porosity, no show

Shale: black, carbonaceous

Limestone: off white to gray, medium crystalline, some oolitic w/poor oomoldic porosity, some poor intercrystalline and poor vuggy porosity, slight show free oil, faint to fair odor, yellow fluorescence in 10% of 3350' drilling sample

Limestone: off white to gray, fine to medium crystalline, very poor intercrystalline porosity, slight show free oil, faint to fair odor, yellow fluorescence in 15% of 30" sample



3400

Limestone: gray to beige, densely oolitic, oolitic, little visible porosity, one rock with very poor intercrystalline porosity and slight show free oil, no odor, trace fluorescence

Limestone: light beige, medium crystalline, some oolitic, poor intercrystalline porosity, very slight show free oil, no odor, trace fluorescence

Limestone: off white to beige, medium crystalline, some oolitic, trace poor intercrystalline porosity w/ slight show free oil on break, no odor, trace fluorescence vis 52 wt 9.0 wl 7.2 lcm 0#

Limestone: gray to beige, coarsely crystalline, dense, no visible porosity, no show

Limestone: gray, coarsely crystalline, very dense, no porosity, no show

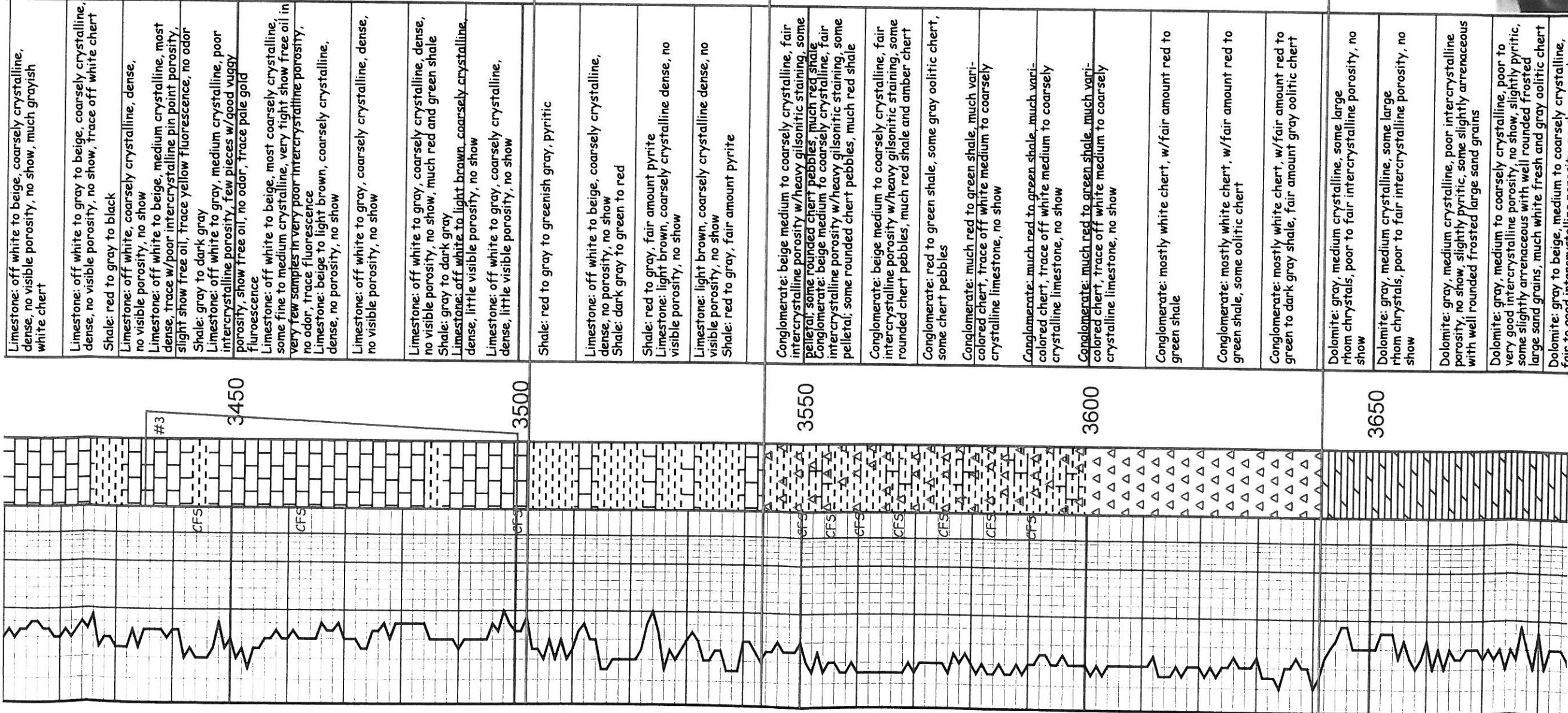
Shale: gray to dark gray

Limestone: off white to gray, coarsely crystalline to chalky, no visible porosity, no show

Shale: gray to dark gray

Limestone: off white to beige, coarsely crystalline, dense, no visible porosity, no show, much grayish white chert





Limestone: off white to beige, coarsely crystalline, dense, no visible porosity, no show, much grayish white chert

Limestone: off white to gray to beige, coarsely crystalline, dense, no visible porosity, no show, trace off white chert

Shale: red to gray to black

Limestone: off white, coarsely crystalline, dense, no visible porosity, no show

Limestone: off white to beige, medium crystalline, most dense, trace w/poor intercrystalline pin point porosity, slight show free oil, trace yellow fluorescence, no odor

Shale: gray to dark gray

Limestone: off white to gray, medium crystalline, poor porosity, show free oil, no odor, trace pale gold fluorescence

Limestone: off white to beige, most coarsely crystalline, some fine to medium crystalline, very tight show free oil in very few samples in very poor intercrystalline porosity, no odor, trace fluorescence

Limestone: beige to light brown, coarsely crystalline, dense, no porosity, no show

Limestone: off white to gray, coarsely crystalline, dense, no visible porosity, no show

Limestone: off white to gray, coarsely crystalline, dense, no visible porosity, no show

Limestone: off white to gray, coarsely crystalline, dense, no visible porosity, no show

Shale: red to gray to greenish gray, pyritic

Limestone: off white to beige, coarsely crystalline, dense, no porosity, no show

Shale: dark gray to green to red

Shale: red to gray, fair amount pyrite

Limestone: light brown, coarsely crystalline dense, no visible porosity, no show

Shale: red to gray, fair amount pyrite

Conglomerate 3543 -1!

Conglomerate: beige medium to coarsely crystalline, fair intercrystalline porosity w/heavy gilsonitic staining, some pellets, some rounded chert pebbles, much red shale

Conglomerate: beige medium to coarsely crystalline, fair intercrystalline porosity w/heavy gilsonitic staining, some pellets, some rounded chert pebbles, much red shale

Conglomerate: beige medium to coarsely crystalline, fair intercrystalline porosity w/heavy gilsonitic staining, some rounded chert pebbles, much red shale

Conglomerate: red to green shale, some gray oolitic chert, some chert pebbles

Conglomerate: much red to green shale, much vari-colored chert, trace off white medium to coarsely crystalline limestone, no show

Conglomerate: much red to green shale, much vari-colored chert, trace off white medium to coarsely crystalline limestone, no show

Conglomerate: much red to green shale, much vari-colored chert, trace off white medium to coarsely crystalline limestone, no show

Conglomerate: mostly white chert, w/fair amount red to green shale

Conglomerate: mostly white chert, w/fair amount red to green shale, some oolitic chert

Conglomerate: mostly white chert, w/fair amount red to green to dark gray shale, fair amount gray oolitic chert

Arbuckle 3641 -1654

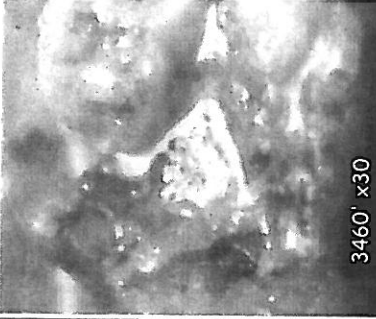
Dolomite: gray, medium crystalline, some large rhom crystals, poor to fair intercrystalline porosity, no show

Dolomite: gray, medium crystalline, some large rhom crystals, poor to fair intercrystalline porosity, no show

Dolomite: gray, medium crystalline, poor intercrystalline porosity, no show, slightly pyritic, some slightly arraneous with well rounded frosted large sand grains

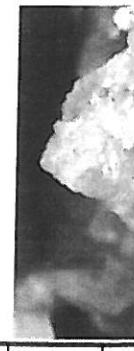
Dolomite: gray, medium to coarsely crystalline, poor to very good intercrystalline porosity, no show, slightly pyritic, some slightly arraneous with well rounded frosted large sand grains, much white fresh and gray oolitic chert

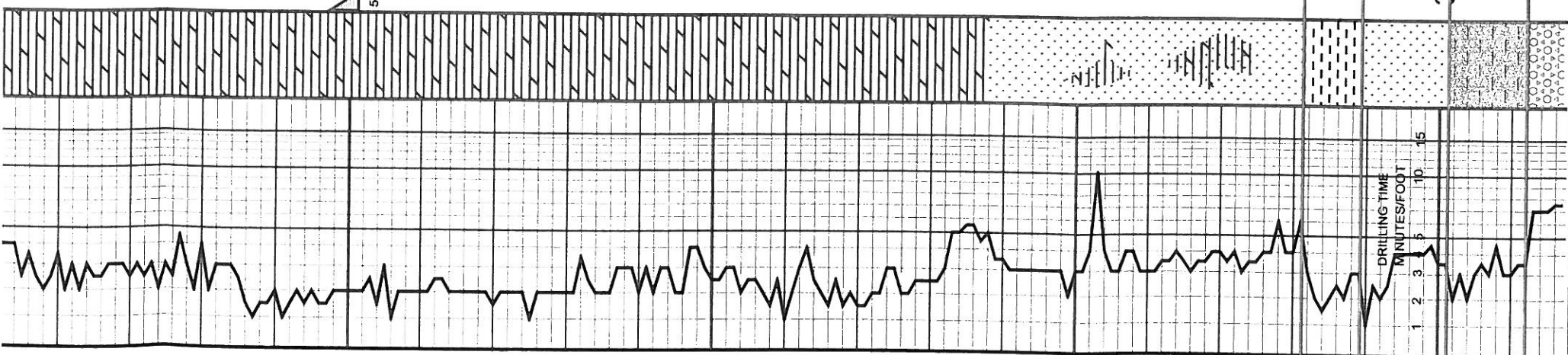
Dolomite: gray to beige, medium to coarsely crystalline, fair to good intercrystalline porosity, no show



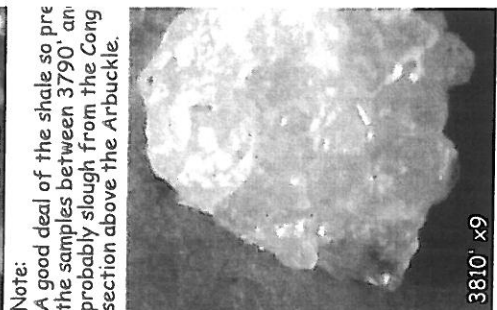
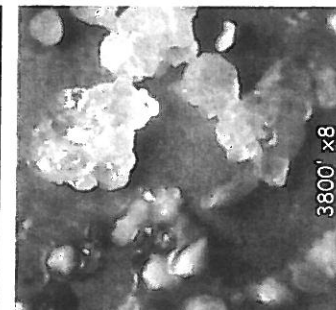
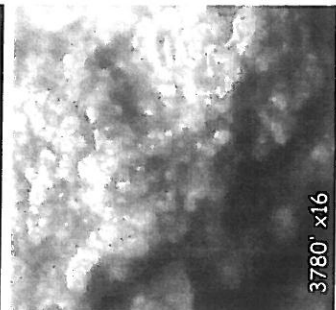
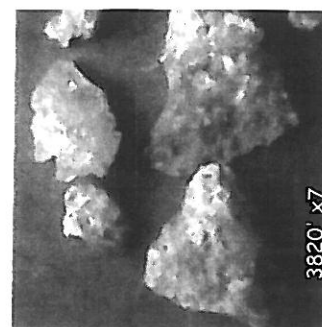
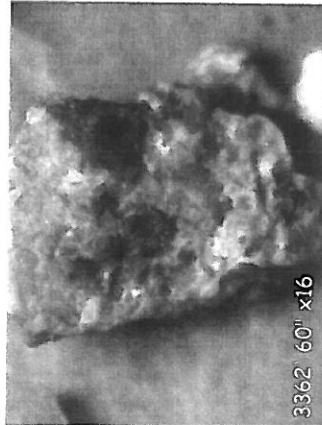
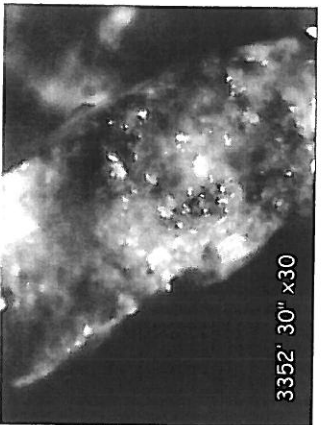
vis 49 wt 9.3 wl 7.8 lcm

Note: there was much gilsonitic throughout the Conglomerate sec in the limestone and the chert

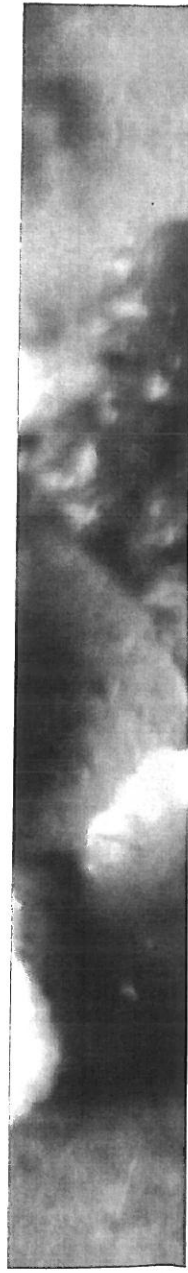


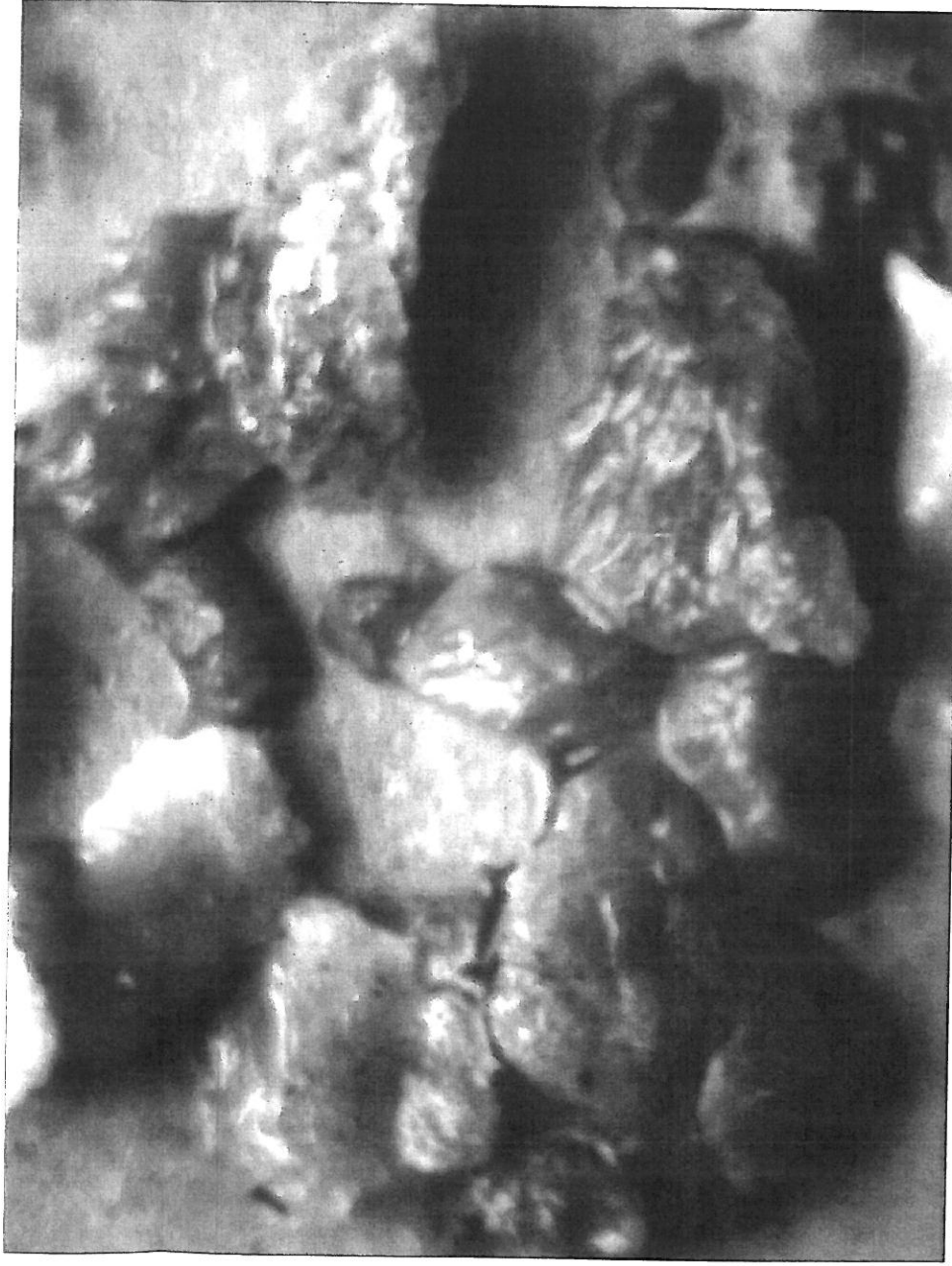


3700 5 1/2" casing shoe	<p>rhomb crystals, poor to fair intercrystalline porosity, no show</p> <p>Dolomite: gray, medium crystalline, poor intercrystalline porosity, no show, slightly pyritic, some slightly arrenaceous with well rounded frosted large sand grains</p> <p>Dolomite: gray, medium to coarsely crystalline, poor to very good intercrystalline porosity, no show, slightly pyritic, some slightly arrenaceous with well rounded frosted large sand grains, much white fresh and gray oolitic chert</p> <p>Dolomite: gray to beige, medium to coarsely crystalline, fair to good intercrystalline porosity, no show, much gray chert</p> <p>Dolomite: gray to beige, fine to medium crystalline, fair to good intercrystalline porosity, no show, much gray chert</p> <p>Dolomite: beige to gray, medium crystalline, poor to fair intercrystalline porosity, no show, much chert vis 47 wt 9.4 wj 8.0 lcm 2##</p> <p>Dolomite: off white to gray, medium crystalline, poor to good intercrystalline porosity, no show, fair amount chert NOTE: Lost circulation @ 3720'</p> <p>Dolomite: beige to off white, fine to medium crystalline, excellent intercrystalline porosity, no show, some off white chert</p> <p>Dolomite: off white to gray, medium to coarsely crystalline dense, poor intercrystalline porosity, no show, some dark gray to greenish gray to red shale</p> <p>Dolomite: off white to gray, most coarsely crystalline, dense, trace medium crystalline w/excellent intercrystalline porosity, no show, fair amount dark gray to red to green shale</p> <p>Dolomite: gray, fine to medium crystalline, fair to good intercrystalline and fair vuggy porosity, no show</p> <p>Dolomite: off white to gray, fine to medium crystalline fair to good intercrystalline and fair vuggy porosity, no show</p> <p>Dolomite: gray, fine crystalline, dense, poor intercrystalline porosity, no show</p> <p>Sandstone: recrystallized quartz crystals, some slightly rounded, some appear in paper thin sheets, much black to red to green shale</p> <p>Sandstone: fair amount free silica, some arrenaceous silica, much red and dark gray shale and medium crystalline dolomite</p> <p>Sandstone: fair amount free silica, some arrenaceous silica, much red and dark gray shale, trace rounded granitic pebbles and medium crystalline dolomite</p> <p>Sandstone: fair amount free silica, some arrenaceous silica, much red and dark gray to green shale</p>
3750	<p>Shale: red and dark gray to green shale, trace pyrite</p> <p>Sandstone: fair amount free silica, some arrenaceous silica, much red and dark gray to green shale, trace pyrite</p> <p>Granite Wash: fine to large clear grains, poorly sorted, poorly cemented, excellent intergranular porosity, no show, many large free grains, trace raspberry chert - much red to green to dark gray shale</p> <p>Granite: quartz & orthoclase, trace hornblend</p>
3800	<p>Base Arbuckle 3831 -1</p> <p>Reagan 3839 -1852</p> <p>Granite Wash 3851 -1</p> <p>Granite 3862 -1875</p>



Note:
A good deal of the shale so pre the samples between 3790' and probably slough from the Cong section above the Arbuckle.

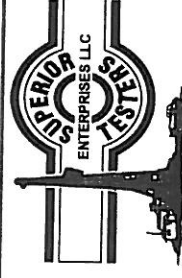




Trans Pacific Oil Corporation
Leiker #9-18
990' FNL & 2970' FEL 18-15S-17W
Ellis County, Kansas

1987 KB

DST results provided



GENERAL INFORMATION: DST #1: 3278-3308/ 30-45-30-45

Formation: Lansing
Deviated: No **Whipstock:** ft (KB)
Time Tool Opened: 14:31:30
Time Test Ended: 18:37:30

Interval: 3278.00 ft (KB) To 3308.00 ft (KB) (TVD)
Total Depth: 3308.00 ft (KB) (TVD)

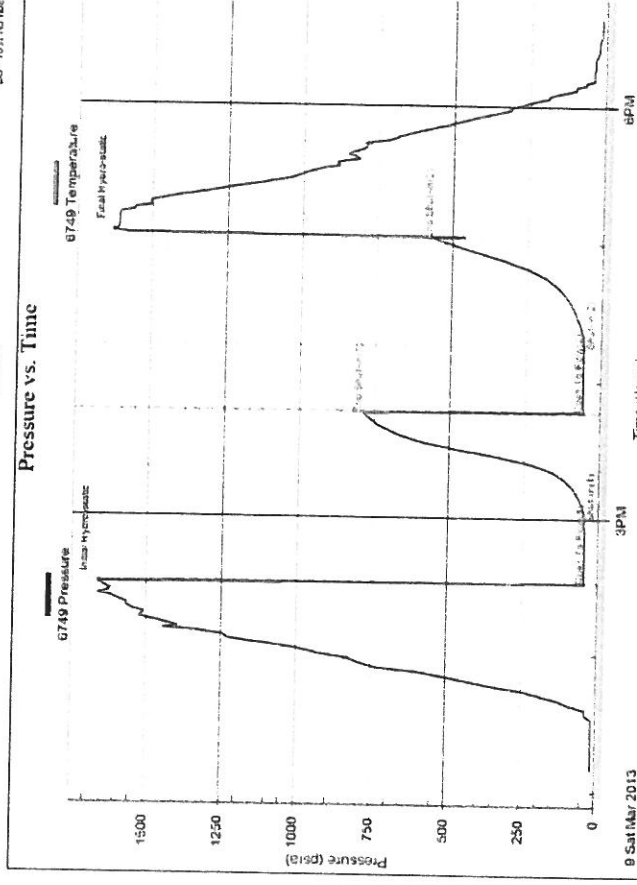
Hole Diameter: 7.80 inches **Hole Condition:** Fair
TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Blow built to 3/4 inch
 1ST Shut In 45 Minutes/No blow back
 2ND Open 30 Minutes/Dead no blow
 2ND Shut In 45 Minutes/No blow back

Test Type: Conventional Bottom Hk
Tester: Ken Swinney
Unit No: 3325 Hays/22
Reference Elevations: 1987.00
 1982.00
 5.00
KB to GR/CF:

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud with show of oil in tool Mud 100%	0.421
Total Length:	Total Volume:	0.421 bbl

Scene # 6748 Inside Trans Pacific Oil Corporation Leiker #9



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1653.12	94.34	Initial Hydro-static
1	43.02	94.22	Open To Flow (1)
31	51.10	94.75	Shut-In(1)
75	793.50	96.33	End Shut-In(1)
76	54.22	96.27	Open To Flow(2)
105	57.46	97.17	Shut-In(2)
152	565.85	98.68	End Shut-In(2)
154	1622.91	99.43	Final Hydro-static

GENERAL INFORMATION:

Formation: Lansing
Deviated: No **Whipstock:** ft (KR)

DST #2: 3311-3377/ 30-45-60-90

GENERAL INFORMATION:**DST #2: 3311-3377/ 30-45-60-90**

Formation: **Lansing**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: **09:32:30**
 Time Test Ended: **14:58:00**
 Interval: **3311.00 ft (KB) To 3377.00 ft (KB) (TVD)**
 Total Depth: **3377.00 ft (KB) (TVD)**
 Hole Diameter: **7.80 inches** Hole Condition: **Fair**
 TEST COMMENT: **1ST Open 30 Minutes/Fair blow/Blow built to 5 1/2 inches in bucket of diesel**
1ST Shut In 45 Minutes/No blow back
2ND Open 60 Minutes/Good blow/Blow built to bottom of bucket of diesel in 59 minutes
2ND Shut In 90 Minutes/Very slight surface blow back

Test Type: **Conventional Bottom Ho**
 Tester: **Ken Swinney**
 Unit No: **3325 Hays/22**

Reference Elevations: **1987.00**
1982.00
5.00
 KB to GR/CF:

TEST COMMENT: **1ST Open 30 Minutes/Fair blow/Blow built to 5 1/2 inches in bucket of diesel**
1ST Shut In 45 Minutes/No blow back
2ND Open 60 Minutes/Good blow/Blow built to bottom of bucket of diesel in 59 minutes
2ND Shut In 90 Minutes/Very slight surface blow back

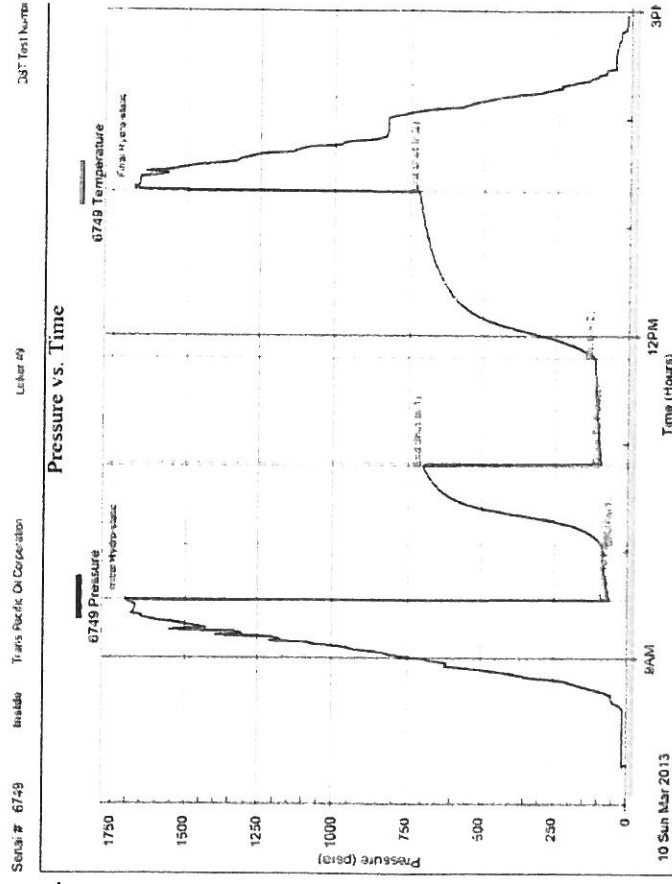
Recovery Table

Length ft	Description	Volume bbl
0.00	125 feet of gas in pipe/Gas 100%	0.000
55.00	Slightly oil and gas cut w atery mud	0.772
0.00	Oil 3% Gas 5% Water 32% Mud 60%	0.000
60.00	Slightly Oil cut Mud	0.842
0.00	Oil 3% Mud 97%	0.000
0.00	Recovery Chlorides 25,000 ppm	0.000

Total Length: **115.00 ft** Total Volume: **1.614 bbl**

PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1695.72	96.30	Initial Hydro-static
1	61.77	95.81	Open To Flow (1)
31	85.84	95.27	Shut-In(1)
75	698.57	97.33	End Shut-In(1)
77	89.42	97.25	Open To Flow (2)
136	114.07	99.48	Shut-In(2)
228	717.73	102.16	End Shut-In(2)
230	1677.21	102.49	Final Hydro-static

**GENERAL INFORMATION:****DST #3: 3435-3500/ 30-45-30-45**

Formation: **Lansing**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: **08:30:30**
 Time Test Ended: **12:15:00**

Interval: **3435.00 ft (KB) To 3500.00 ft (KB) (TVD)**
 Total Depth: **3500.00 ft (KB) (TVD)**
 Hole Diameter: **7.80 inches** Hole Condition: **Fair**
 TEST COMMENT: **1ST Open 30 Minutes/Weak blow/Blow built to 1 inch then died to 1/2 inch**
1ST Shut In 45 Minutes/No blow back
2ND Open 30 Minutes/Dead no blow
2ND Shut In 45 Minutes/No blow back

Test Type: **Conventional Bottom Hc**
 Tester: **Ken Swinney**
 Unit No: **3325 Hays/22**

Reference Elevations: **1987.00**
1982.00
5.00
 KB to GR/CF:

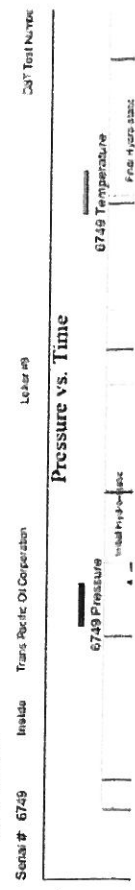
Recovery Table

Length ft	Description	Volume bbl
10.00	Mud with show of oil in tool/Mud 100%	0.140

Total Length: **10.00 ft** Total Volume: **0.140 bbl**

PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation



Interval: 3435.00 ft (KB) To 3500.00 ft (KB) (TVD) Reference Elevations: 1987.00 1
 Total Depth: 3500.00 ft (KB) (TVD) 1982.00 1
 Hole Diameter: 7.80 inches Hole Condition: Fair KB to GR/CF: 5.00 1

TEST COMMENT: 1ST Open 30 Minutes/Weak blow/Blow built to 1 inch then died to 1/2 inch
 1ST Shut In 45 Minutes/No blow back
 2ND Open 30 Minutes/Dead no blow
 2ND Shut In 45 Minutes/No blow back

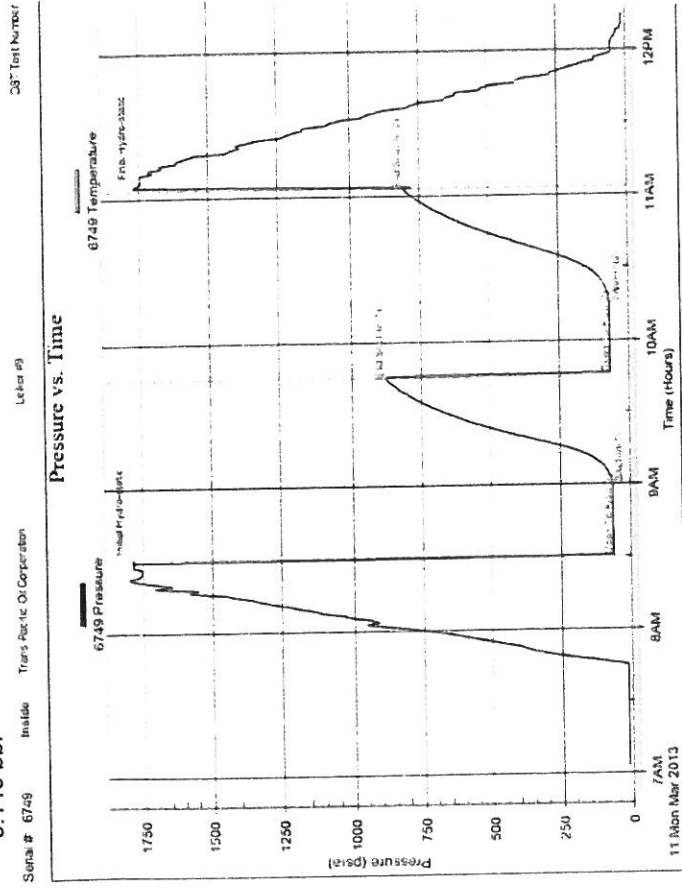
Recovery Table

Length ft	Description	Volume bbl
10.00	Mud with show of oil in tool/Mud 100%	0.140

Total Length: 10.00 ft Total Volume: 0.140 bbl

PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1784.57	96.66	Initial Hydro-static
1	61.98	96.12	Open To Flow (1)
32	65.10	96.00	Shut-In(1)
76	879.69	98.43	End Shut-In(1)
77	66.21	98.32	Open To Flow (2)
107	68.16	99.59	Shut-In(2)
154	809.17	101.65	End Shut-In(2)
156	1759.61	102.05	Final Hydro-static



38" Test Number

Letter #9

Trans Pack. Oil Corporation

Inside

Series # 6749

Total Volume: 0.140 bbl

Total Length: 10.00 ft

Total Length: 10.00 ft

Total Length: 10.00 ft