



# SCHLUMBERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS

SIMULTANEOUS



## Gamma Ray-Neutron

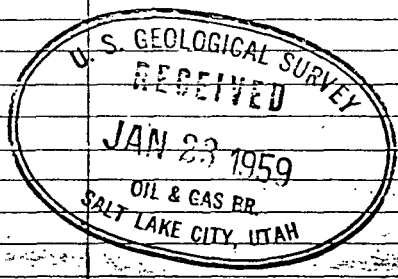
COUNTY CARBON  
 FIELD or LOCATION WILDCAT  
 WELL CALYBANK SPRINGS  
 COMPANY PETAN COMPANY

COMPANY PETAN COMPANY  
 WELL CLAYBANK SPRINGS  
 # 1  
 FIELD WILDCAT  
 LOCATION SEC33-12S-15E *NE 1/4*  
SLM1616S 1166E NW CORNER  
 COUNTY CARBON  
 STATE UTAH

Other Surveys  
IES-ML-SL  
 Location of Well  
SEC. 33-12S-15E  
SLM 1616'S  
1166'E  
NW CORNER  
 Elevation: D.F.: 6362  
 K.B.: \_\_\_\_\_  
 or G.L.: \_\_\_\_\_  
 FILING No. 365

Log Depths Measured From KB 11.0' Ft. above GL

RUN NO.	ONE		
Date	11-21-58		
First Reading	5520	231	
Last Reading	240		
Footage Measured	5280		
Max. Depth Reached	5521		
Bottom Driller	5519		
Maximum Temp. °F.	175		
Fluid Nature	CHEM		
Fluid Level	FULL		
(Casing Size	9	5/8 in.)	in.)
(Casing Weight		lb. (SURF to 240	lb. } to
(Casing Size		in.)	in.)
(Casing Weight		lb. } to	lb. } to
Bit Size	7	7/8 in. 240 to TD	in. } to
Bit Size		in. to	in. } to
No. Counters Used	SCINT		
Type Equipment	GNAM-4		
Type Panel	GNP-C		
Opr. Rig Time	4 HRS.		
Truck No.	2791 CRTZ.		
Observer	WALDRON		
Witness	MESSRS. EVANS & FEDER		



365

	sh	ss	ls	ke	
500 - 1000	30	70	-	8.2	4100
1000 - 1500	40	45	5	6.4	3200
1500 - 2000	65	25	10	5.8	2900
2000 - 2500	50	50	✓	7.0	3500
2500 - 3000	45	55	✓	7.3	3650
3000 - 3500	80	20		5.2	2600
3500 - 4000	90	10		4.6	2300
4000 - 4500	85	15		4.9	2450
4500 - 5000	85	15	✓	4.9	2450
134°F 5000 - 5288 BHT	50	50 (288')		7.0	2016 <sup>2916</sup> / <sub>4788</sub>
115°F 5288 - 5520 BHT	75	25 (232')		5.5	1276
					30442 5020

BHTs

134°F @ 5288

ke = 6.1

115°F @ 5520

ke = 6.1

ECU 365

surface - Green River  
Began logging 500'



# Production Focused Log

WITH LINEAR CORRELATION LOG

FILE NO. R-386	COMPANY RESERVE OIL & GAS COMPANY	
	WELL PETERS POINT UNIT 11A	
	FIELD PETERS POINT	
	COUNTY CARBON	STATE UTAH
LOCATION: 1260' FSL & 639' FEL		Other Services CND  372
SEC 35	TWP 12S	RGE 16E

Permanent Datum	GROUND LEVEL	Elev. 6768	KB 6778
Log Measured from	R.K.B.	10 Ft. Above Permanent Datum	DF 6777
Drilling Measured from	R.K.B.		GL 6768

Date	10/11/76	10/21/76		
Run No.	ONE	TWO		
Depth—Driller	3250	4700		
Depth—Logger	3254	4710		
Bottom Logged Interval	<del>3252</del>	<del>4708</del>		
Top Logged Interval	822	3050		
Casing—Driller	8 5/8 @ 823	823 @ 8 5/8	@	@
Casing—Logger	822	822		
Bit Size	7 7/8"	7 7/8"		
Type Fluid in Hole	CHEM GEL	CHEM GEL		
	@	@	@	@
Density and Viscosity	9.5   36	9.6   45		
pH and Fluid Loss	11.0   5.0 cc	9.5   5.8 cc		cc
Source of Sample	CIRCULATED	FLOWLINE		
Rm @ Meas. Temp.	.68 @ 74 °F	1.4 @ 70 °F	@	°F @
Rmf @ Meas. Temp.	.58 @ 74 °F	.98 @ 74 °F	@	°F @
Rmc @ Meas. Temp.	.80 @ 74 °F	2.4 @ 74 °F	@	°F @
Source of Rmf and Rmc	M   M	M   M		
Rm @ BHT	@	@	@	°F @
Time Since Circ.	4 HOURS	5 HOURS		
Max. Rec. Temp. Deg. F.	<del>2100</del> °F	<del>2100</del> °F		°F
Equip. No. and Location	6089   RSVLT	6089   RSVLT		
Recorded By	MCCALL	MILHOAN-MCCALL		
Witnessed By	MR. CARR	MR. CARR		

ECU 372

surface in Green River - began logging @ 1500 ft in Green River.

		<u>sb</u>	<u>ss</u>	<u>ls</u>	ke	
1500-2720	1220	30	60	10	7.9	9638
Basal Green R.						
2720-3800	1080	45	55		7.3	7884
Watch						
3800-4700	900	90	10		4.6	4140
Watch Cont						

weighted  
6.1

3200  
~~1220~~

21662

1080  
900  
1980

6.8

total

4708  
2720  
1978

COUNTY CARBON  
 FIELD or LOCATION WILDCAT  
 WELL PETERS POINT  
 NO. 1-10  
 COMPANY CHORNEY OIL ET AL.

COMPANY CHORNEY OIL COMPANY, PACIFIC GAS  
 TRANS. CO. AND MONO POWER CO.  
 WELL PETERS POINT NO. 1-10  
 FIELD WILDCAT  
 COUNTY CARBON STATE UTAH  
 LOCATION NE SW  
 Sec. 10 Twp. 13S Rge. 16E  
 Other Services:  
 BHC-GR  
 FDC-GR  
 CNL-GR 377

Permanent Datum: G.L., Elev. 6739  
 Log Measured From K.B., 11 Ft. Above Perm. Datum  
 Drilling Measured From K.B.  
 Elev.: K.B. 6750  
 D.F. -----  
 G.L. 6739

Date	7-17-72	8-26-72		
Run No.	ONE	TWO		
Depth-Driller	5002	9124		
Depth-Logger	4985	9120		
Btm. Log Interval	4979	9114	Confidential	
Top Log Interval	503	4979		
Casing-Driller	13-3/8@505	13-3/8@505	@	@
Casing-Logger	503	503		
Bit Size	7-7/8	7-7/8		
Type Fluid in Hole	FGM	FGM		
Dens.	8.7	5.1	8.8	48
Visc.				
pH	8.0	6.8 ml	8.0	8.0 ml
Fluid Loss				ml
Source of Sample	TANK	MUD TANK		
R <sub>m</sub> @ Meas. Temp.	3.47@ 90 °F	3.49@ 65 °F	@ °F	@ °F
R <sub>mf</sub> @ Meas. Temp.	2.17@ 89 °F	2.35@ 65 °F	@ °F	@ °F
R <sub>mc</sub> @ Meas. Temp.	1.8 @ 90 °F	5.25@ 65 °F	@ °F	@ °F
Source: R <sub>mf</sub> R <sub>mc</sub>	M C	M C		
R <sub>m</sub> @ BHT	2.47@ 128°F	1.42@ 162°F	@ °F	@ °F
Time Since Circ.	6 HOURS	13 HOURS		
Max. Rec. Temp.	128 °F	162 °F	°F	°F
Equip. Location	7647 VERN	7647 VERN		
Recorded By	FARR	MC MATH		
Witnessed By	OSTLING	OSTLING & COX		





377

surface Green River  
logged from 500'

BHTS' 132 @ 4982

$k_e = 6.2$

162 @ 9124

in manner  $k_e = 6.0$

(500) 0-500 7.0 3500

(1260) 500-1760 8.2 10332

(390) 1760-2150 6.7 2613

(952) 2150-3102 5.6 5331

(488) 3102-3590 6.1 2977

3968 3590-7558 5.5 21824

(1494) 7558-9052 5.5 8217

(72) 9052-9124 4.0 288

9124

55082

46577

7558

# ECU 377

surface in Green River

log begins at 500

	sh	ss	ls		re
✓ 500 - 1760 GIR	20	60	20	1260	8.2

1760 - 2150

GIR MARKER	45	35	20	390	6.7
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2150 - 3102  
Wasatch Tongue

65	20	15	952	5.6
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3102 - 3590

upper Wasatch	65	35	488	6.1
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3590 - 7558						3968	5.5
middle wasatch						re	
3590 - 4980	BAT 1390	80	15	5	5.0	6950	
4980 - 6000	1020	80	15	5	5.0	5100	
6000 - 7000	1000	60	40	✓	6.4	6400	
7000 - 7558	558	70	30	-	5.8	3236	
3968						21686	

7558 - 9052

	sh	ss	ls		
Mesa Verde	75	25		1494	5.5

9052 - 9124

Mesa Verde	100			72 (bottom)	4.0
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T.D. = Mesa Verde = 9124

SAMPLE DESCRIPTION

30' intervals from surface to 1900'  
 10' intervals from 1900' to T.D.  
 (depths adjusted to Gamma Ray Log)

<u>Depth</u>	<u>Lithology</u>
500-1760	<p>The well spudded in the Green River Formation. This interval is mostly sandstones, white to dark gray, medium to coarse grained, angular to sub-angular, poor to fair sorting, fair to well cemented with clay and calcite, with traces of mica and 5-10% dark minerals. Porosity is fair to good and the sandstones range from 5 ft. to over 30 ft. thick. The interbedded shales are blue-gray, dark red and purple, some are slightly waxy. Siltstones are dark gray, micaceous and slightly sandy. There are a few limestones, white to buff and tan, dense to chalky with no porosity. This interval had no reservoir beds with shows of recoverable oil or gas.</p> <p>Sample 1852'      <u>GREEN RIVER MARKER</u>      Log 1936'</p>
1760-2150	<p>Shales, dark red to brownish-red, siltstones, gray to dark brown and thin beds of tan Marlstone. There were no shows of oil or gas in this interval.</p> <p>Sample      <u>WASATCH TONGUE</u>      Log 2150'</p>
2150-3102	<p>Sandstone beds 5 ft. to 15 ft. thick, white to light orange, fine to medium grained, angular to sub-round, some slightly frosted grains, friable in part, well sorted and cemented, slightly calcareous, poor to fair porosity. Interbedded are shales red to gray-green. The sandstone at 2694 to 2720 ft. had good stain and odor of oil with good fluorescence and cut, (see DST #1 - Page 9). All other sandstone beds had no shows of recoverable oil or gas.</p> <p>Sample      <u>UPPER WASATCH</u>      Log 3102'</p>
3102-3590	<p>This interval is mostly shales and siltstones with interbedded sandstones, ranging in thickness from 5 ft. to 25 ft. and having porosities from poor to fair (5% to 14%; average 12% with a maximum of 18% at 3446-3462 from sonic log). Sandstones, white to light orange, medium to coarse grained, angular to sub-round, clear to colored grains, well cemented, friable in part, becoming very fine to fine grained at bottom of interval, traces of pyrite and dark minerals, shales are red to green-gray and slightly waxy.</p>

DepthLithology

Sample 3450'

MIDDLE WASATCH

Log 3590'

3590-7558

This interval includes sandstone beds ranging from less than 10 ft. to over 50 ft. thick, interbedded with shales, red and green-gray and some varicolored; siltstones, gray to brown. The sandstones are white to gray, very fine to medium grained, sub-angular to sub-round, some angular, fair to well sorted, well cemented with clay and slightly calcareous, grains are clear in part to frosted, with traces of pyrite and chlorite. Porosities are poor to fair (at top of interval is a maximum of 18%, but average below 5600 ft. is 6-8% from sonic log).

Individual sandstone beds with any shows are as follows:

4368 to 4385' Sandstone, white to gray and light tan, fine to medium grained, fair sorting, sub-angular to sub-round, well cemented with clay and calcareous, 5% dark minerals, good spotty fluorescence, poor to fair cut, (see DST #2 - Page 9).

4544 to 4566' Sandstone, white to gray, very fine to fine gray, sub-angular to sub-round, well cemented, poor porosity & permeability, 25-50% of sand has spotty fluorescence some is mineral fluorescence, trace cut. Not tested.

5030-5074' Sandstone, white to gray, fine grained, sub-angular to sub-round, fair sorting, clear to frosted, 10% dark minerals, clay and calcareous cement, trace of stain and dull yellow fluorescence, slight cut (see DST #3 - Page 10).

5094-5108' Sandstone, white to gray, medium grained, fair sorting, well cemented, sub-angular to sub-round, fair porosity, fair to good stain and fluorescence with a slight cut (see DST #4 - Page 10).

5203-5222' Sandstone, white to gray, fine to medium grained, fair sorting, sub-angular to sub-round some angular, clear to tan, 15-20% dark minerals, trace of chlorite, no stain, no fluorescence (see DST #5 - Page 11).

5540-5558' Sandstone, white to gray, fine to medium grained, well cemented, some loose grains, trace of fluorescence, 10-15% dark minerals, no stain, slight cut (see DST #6 - Page 11).

DepthLithology

6216-6236' Sandstone, white to gray, very fine grained, well cemented with traces of carbonaceous material, fair sorting and trace of fluorescence, no shows of oil, poor porosity.

6562-6625' Sandstone, white to gray, very fine grained, clear to tan in part, well cemented, hard and tight at top, slightly friable at base, poor porosity, no stain, bright fluorescence when wet and fresh.

7260-7275' Sandstone, white to gray, some dark brown, carbonaceous to "coaly" material, fair sorting, well cemented, sub-angular to sub-round, poor porosity, trace of pyrite and dead oil, no fluorescence.

Sample 7446'                      MESAVERDE FORMATION                      Log 7558'

7558-9052'

This interval is mostly thick sandstones interbedded with dark gray to brown-gray shales and siltstones and thin coal beds at the base.

The sandstones are white, very fine to fine grained, well sorted, fair to well cemented with silica, angular to sub-angular, mostly clear quartz grains, poor porosity, beds became less angular and dirty in part at base. There were no shows of oil and gas, shows were usually associated with coal beds or relatively low magnitude. Porosities averaged 2% to 6% on the sonic log.

8396-8416 & 8420 to 8442' Sandstone, white to gray, very fine to fine grained, fair sorting, silica cement, poor to fair porosity, had a moderate gas kick and although there was no oil stain, it was tested (see DST #7 - Page 14).

8972-8994' Shale, light to dark gray.

8994-9028' Siltstone and sandstone, gray, poorly sorted, clay filled and carbonaceous, very poor porosity, no shows.

Sample 8975'                      MANCO SHALE                      Log 9052'

9052-9124'

Shales, dark gray, and siltstones gray to brown.

Examined by:

*Earl J. Ostling*  
EARL J. OSTLING, Consulting Geologist

Schlumberger

WELL LOG - ELECTRICAL LOG

COUNTY CARBON  
 FIELD or LOCATION PETERS POINT  
 PETERS POINT  
 WELL PETERS POINT  
 UNIT #10  
 COMPANY KIMBARK OPERATING

COMPANY KIMBARK OPERATING COMPANY

WELL PETERS POINT UNIT #10

FIELD PETERS POINT

COUNTY CARBON STATE UTAH

LOCATION 695 FNL 2620 FWL *12/15*

Other Services: FDC-CNL-GR

Sec. 6 Twp. 13S Rge. 17E *380 2*

Permanent Datum: G.L., Elev. 6733

Log Measured From K.B., 11 Ft. Above Perm. Datum

Drilling Measured From K.B.

Elev.: K.B. 6744  
 D.F. -  
 G.L. 6733

Date	9-13-74				
Run No.	ONE				
Depth—Driller	4840				
Depth—Logger	4846				
Btm. Log Interval	4840				
Top Log Interval	225				
Casing—Driller	8 5/8 @	226	@	@	@
Casing—Logger	225				
Bit Size	7 7/8				
Type Fluid in Hole	FGM				
Dens.	8.9	33			
Visc.					
pH	9	7 ml	ml	ml	ml
Fluid Loss					
Source of Sample	CIRC				
R <sub>m</sub> @ Meas. Temp.	3.73 @	68 °F	@	°F	@ °
R <sub>mf</sub> @ Meas. Temp.	2.99 @	68 °F	@	°F	@ °
R <sub>mc</sub> @ Meas. Temp.	2.0 @	68 °F	@	°F	@ °
Source: R <sub>mf</sub>	M	C			
R <sub>mc</sub>					
R <sub>m</sub> @ BHT	2.41 @	105 °F	@	°F	@ °
Time Since Circ.					
Max. Rec. Temp.	105	°F	°F	°F	°F
Equip.	7683	VRNI			
Location					
Recorded By	LUCACHICK				
Witnessed By	CARR				

ECU 380

see 6, T135-R17E

Lith by (?)

EST. COMP.

LOG BEGINS AT 1200' IN LOWER GREENRIVER

	THICKNESS	sh	ss	carb	ke
GREENRIVER (1590') WITH 1430' IN DOUGLAS CREEK ↳	LOWER 1590	30	40	30	7.3
WASATCH	UPPER 2050	58	38	4	6.4

BOTTOM IN WASATCH AT 4840

BHT's

105°F @ 4840 (TO)

ke = 6.7

Not Charted

380

log bejwi 1200' in Tgr

(2790) 0 - 2790 Green River 7.0 19530

(2050) 2790 - 4840 Watch 6.4 13120

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4840

$k_e = 6.7$



DETAILED SAMPLE DESCRIPTION

- 1200-1220 Interbedded maroon shale with white sand, fine, hard, glassy, very calcareous.
- 1220-1240 Sand, fine to medium, angular, white, heavy oil tar stain, streaming cut, strong fluorescence, good porosity.
- 1240-1260 Oolitic limestone, white, with dark gray polished nodules.
- 1260-1280 Missing
- 1280-1320 Sand, white, fine, hard, very calcareous
- 1320-1340 Lime, white, sandy, oolitic.
- 1340-1360 Mostly cavings
- 1360-1380 Lime, white, very sandy
- 1380-1400 Shale, gray, sandy, very calcareous.
- 1400-1420 Sand, fine to medium, angular, heavy tar residue, bright yellow fluorescence.
- 1420-1440 As above, with white lime.
- 1440-1460 Asphalt impregnated sand.
- 1460-1480 Sand, white, poorly sorted, hard.
- 1480-1540 Shale, maroon, with some purple and green shale.
- 1540-1560 Above shale with stringers of gray sandy lime.
- 1560-1600 Sand, gray, fine to medium, asphalt residue.
- 1600-1620 Missing
- 1620-1640 Sand, gray, fine to medium, angular, with asphalt residue.
- 1640-1680 Shale, maroon
- 1680-1720 Mostly cavings, red and gray shale
- 1720-1760 Sand, white, very fine, hard, very calcareous. Scattered asphalt residue.
- 1760-1800 Maroon shale interbedded with above sand.

- 1800-1820 Lime, white, very sandy, some oolitic limestone.
- 1820-1840 Sand, white, fine to medium, subangular, scattered pinpoint, asphalt residue.
- 1840-1860 Shale, maroon
- 1860-1900 Sand, gray, medium, subangular, saturated with asphaltic residue.
- 1900-1920 Above sand; no stain.
- 1920-1960 Dolomite, white, sandy, some oolites.
- 1960-1980 Limestone, brown.
- 1980-2000 Above lime with sand stringers, gray, medium grain, asphalt residue.
- 2000-2020 Dolomite, brown, sandy, hard.
- 2020-2060 Limestone, brown, oolitic with some scattered oil stain.
- 2060-2080 Sand, gray, very fine, hard, tight, light oil stain, weak fluorescence.
- 2080-2100 Above sand with oolitic lime.
- 2100-2120 Limestone, brown, hard
- 2120-2160 Above lime with stringers of gray sand, medium to coarse, with scattered oil residue
- 2160-2220 Limestone, brown, hard
- 2220-2240 Same as above
- 2240-2260 Missing
- 2260-2300 Shale, gray-green with some maroon shale
- 2300-2320 Above shale with some white sand, slightly calcareous, poor porosity.
- 2320-2340 Shale, maroon, very sandy.
- 2340-2360 Interbedded with white sand, fine, slightly calcareous, poor porosity.
- 2360-2400 Shale, maroon, interbedded with stringers of gray sand, fine, some porosity with scattered gilsonite.
- 2400-2460 Sand, gray, fine, fair porosity, scattered gilsonite.
- 2460-2480 With interbedded red shale.

- 2480-2500 Sand, light gray, medium, subangular, good porosity, black tar residue.
- 2500-2520 Shale, maroon, sandy.
- 2520-2560 Sand, brown friable, medium, subangular, scattered asphalt stain, light fluorescence.
- 2560-2580 Sand, light gray, fine to medium, subangular, fair to good porosity, faint yellow fluorescence. 20 unit gas increase.
- 2580-2600 Interbedded gray green shale with brown oolitic and ostracodal limestone.
- 2600-2620 Interbedded gray green shale, with sand, medium, subangular, fair porosity, brown oil stain, some scattered black tar residue.
- 2620-2640 Sand, light gray, friable, medium, subangular, scattered tar residue.
- 2640-2680 Limestone, gray and brown, oolitic interbedded with gray and red shale.
- 2680-2720 Shale, maroon, sandy.
- 2720-2740 Maroon shale with sand, gray, fine, angular, very hard, calcareous cement.
- 2740-2760 Stuck drill pipe at 2754. Spotted 25 bbls diesel oil. Poor samples.

TOP LOWER GREEN RIVER SAND ZONE 2760

- 2760-2770 Very poor samples. Mostly cavings from freeing drill pipe. Heavy background effect from diesel in mud system. Brown, dolomitic sand. No shows. Mud logger registered 30 unit methane increase.
- 2770-2790 Sand, dark gray, fine, very hard and tight, dolomitic; no shows.

TOP WASATCH MARKER 2790

- 2790-2820 Shale, maroon
- 2820-2880 Shale, maroon, very sandy.

TOP Tw 2 SAND 2880

- 2880-2910 Sand, gray, medium, subangular, calcareous cement, friable, fair porosity, light brown stain, slight cut, even yellow fluorescence. 10 unit methane gas increase.
- 2910-2920 Above sand with less stain and fluorescence.

2920-2930 Shale, maroon.

TOP Tw 3 SAND 2930

2930-2940 Sand, gray, salt and pepper, medium, subangular, slightly calcareous, some orange grains, chips of augite, scattered trace of gilsonite, good porosity, even light yellow fluorescence, slight cut. 20 unit increase of all 5 gases starting at 2936.

2940-2950 Above sand with better porosity, some dark brown oil stain, live oil cut, solid yellow fluorescence.

2956 Circulated 30 minutes. Same as above.

2960-2980 Same as above with less oil stain, weak cut, solid yellow fluorescence.

2980-2990 Same sand. Pale blue fluorescence. No oil shows.

2990-3000 Sand, gray with some pale green grains, medium, subangular, low porosity, slight oil stain, live cut, solid yellow fluorescence.

3000-3010 Poor sample, mostly cavings.

3010-3030 Shale, maroon, high gas background.

TOP Tw 4 SAND 3030

3030-3070 Sand, gray, medium, slightly calcareous, black tar and gilsonite, weak brown stain, live cut, pale blue fluorescence. Fluorescence decreasing below 3040. Increase in Methane 3030-3060.

3070-3080 Shale, pale red and gray, very sandy

3080-3110 Above shale with stringers of sand, buff, some feldspar, medium, friable, no shows.

3110-3120 Sand, buff to light pink, medium, angular to subangular, some feldspar, calcareous cement, no shows.

3120-3130 Maroon shale

3130-3150 Sand, pale pink, medium, angular to subangular, considerable feldspar, calcareous cement, fair porosity, no stain, weak cut, pale blue fluorescence.

3150-3220 Shale, maroon, sandy

3220-3280 Above shale, with sand stringers, pale pink to buff, angular, much feldspar, argillaceous, no shows.

3280-3400 Shale, maroon, sandy. 20 unit methane increase at 3397.

TOP CHAPITA ZONE 3400

- 3400-3420 Sand, buff to pale pink, medium grain, subangular, calcareous with some feldspar; low porosity, no stain, faint cut, pale yellow fluorescence.
- 3420-3540 Above sand with some gray salt and pepper quartz sand, fine to medium, calcareous cement, fair porosity, no shows of oil or gas.
- 3540-3580 Sand buff to light pink, considerable feldspar, medium, subangular, calcareous cement, low porosity, no shows of oil or gas.
- 3580-3620 Limestone, dark maroon, interbedded with maroon shale.
- 3620-3750 Shale, maroon with some gray-green shale.
- 3750-3780 Sand, gray, fine, argillaceous interbedded with maroon shale.
- 3780-3810 Sand, light gray, salt and pepper, some green grains, medium, subangular, hard, with calcareous cement.
- 3810-3850 Maroon shale with stringers dirty gray, very argillaceous limestone.
- 3850-3880 Maroon shale with stringers of sand, buff to pale pink.
- 3880-3900 Sand, pale pink to buff, medium, subangular, some black, angular grains, calcareous cement.
- 3900-3940 Above sand, unconsolidated
- 3940-3980 Maroon shale
- 3980-4000 Maroon shale, interbedded with sand, dirty gray to buff, subangular, very argillaceous, calcareous cement, poor porosity.
- 4000-4040 Shale, maroon with some gray green
- 4040-4060 Above shale with stringers dirty gray, argillaceous
- 4060-4100 Increasing amount of sand, buff to pale pink with some black grains, medium, subangular, sorted, friable, some orange and green grains, good porosity.
- 4100-4200 Maroon shale
- 4200-4500 Maroon shale with occasional stringers of argillaceous sand and limestone.
- 4500-4520 Maroon shale with some sand, buff, medium, friable
- 4520-4540 Sand, buff, medium, subangular, friable with maroon shale stringers.
- 4540-4580 Shale, maroon and gray green with stringers of above sand.

- 4580-4620 Maroon and gray green shale
- 4620-4640 Above shale with some limestone, gray, sandy, very hard.
- 4640-4690 Shale, maroon with some gray shale
- LOWER Tw SAND 4690
- 4690-4700 Above shale with stringers of sand, gray with black angular grains, medium to coarse, angular to subangular, some pyrite, poor porosity, occasional trace brown oil stain, strong yellow fluorescence, streaming cut.
- 4700-4710 No sample. Hole in drill pipe
- 4713 Above sand, slightly calcareous, hard, tight, low porosity, faint stain, weak cut, strong fluorescence.
- 4720-4780 Shale, maroon and gray green
- 4780-4800 Above shale with stringers of sand, gray, fine to medium, trace of porosity, no shows. 90 unit methane 4783-4786.
- 4800-4810 Shale, maroon and gray green
- 4810-4820 Above shale with thin stringers dirty gray sand, fine, argillaceous.
- 4820-4840 Maroon shale.

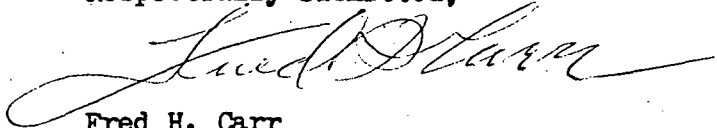
SEP

REMARKS AND CONCLUSIONS

The Peters Point Unit #10 was a thorough test of all known potential producing horizons in the prospect area. The Lower Green River Sand zone was poorly developed. The Tw 2 Sand was broken into several thin sand lentels. The Tw 3 Sand was well developed with gas and water. There was no reservoir sand development in the Lower Wasatch Zone.

Throughout the Douglas Creek member of the Green River Formation were numerous sand zones saturated with dead oil, tar and asphalt residue. Of particular interest were several thick porous zones between 1400 and 1800 feet. While drilling through this interval and while making connections, free oil came to the surface of the mud pits.

Respectfully submitted,



Fred H. Carr  
Certified Professional Geologist #1430

# WELL LOG BHT'S FROM UGMS CARBON COUNTY UTAH

WELL No	SEC	T	R	DEPTH	°F	GRADIENT		
						°F/1000'	°F/1000'	
1.	24	13S	16E	5142	105	11.7	45	with new ambient ✓ 4700
2.	18	13S	17E	3262	90	13.8		✓ 3985
3.	21	13S	17E	3201	95	15.6		✓ 3526
4.	6	13S	17E	2128 8308	100 144	25.8	25.8	2132 ✓ 4622
5.	11	13S	16E	3155 4685	125 130	25.4	25.4	✓✓✓
6 <sup>x</sup>	20	12S	17E	3478 5140	92 143	13.1		✓
7.	NE SW 36	12S	16E	4530	102	12.6		✓
8.	33	12S	16E	3535	92	13.3		✓
9.	33	12S	16E	3507	90	12.8		✓
10.	28	12S	16E	3040	87	13.8		✓
11.	SE NE 32	12S	16E	3275	110	19.8	19.8	
12.	31	12S	16E	2294	115	30.5	30.5	
13.	33	12S	15E	5516	115	12.7		✓
14.	24	13S	14E	2680	92	17.5		✓
15.	14	12S	14E	5886	135	15.3		✓
16.	NW NE 27	12S	10E	3130	94	15.6	43	✓
17.	10	14S	12E	1997	85	20.0	51	✓ NO
18.	22	14S	12E	2334	93	20.6		✓ NO
19.	NW NE 16	14S	11E	1600	90	28.1		
20.	C NW 6	15S	10E	1994	104	29.6		26.6
21.	28	15S	10E	1490	80	23.5		19.4
22.	26	15S	10E	1214	85	32.9		28.0



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WELL No	SEC	T	R	DEPTH	°F	GR		new ambient	
						°F/1000	43	°F/1000	
23	20	12S	7E	5913	90 <sup>14</sup>	7.6	43	✓	✓
				7895	126	10.2		✓	✓
24	13	13S	6E	5413	106	11.3		✓	✓
25	18	13S	7E	4250	99	12.7		✓	✓
26	29	13S	7E	4835	105	12.4		✓	✓
27	31	13S	7E	5794	102	9.8		✓	✓
28	32	13S	7E	4639	94	10.6		✓	✓
29	32	13S	7E	4165	100	13.2	✓	✓	✓

end  
plotted

# CARBON CO

no of wells : 32

Anomalous " : 10

sec	T	R	depth (m)	°C	°C/m	amb
11	12S	14E	1499	68.3	41	7.2
7	13S	17E	392	62.8	142	7.2
6	13S	17E	649	37.8	47	7.2
11	13S	16E	962	51.7	46	7.2
32	12S	16E	998	43.3	36	7.2
31	12S	16E	699	46.1	56	7.2
✓ 16	14S	11E	488	32.2	44	10.6
✓ 6	15S	10E	608	40.0	48	
✓ 28	15S	10E	454	26.7	35	
✓ 26	15S	10E	370	29.4	51	

PI

CARBON CO

No

- X 95 ~~○~~ 40.8 °C/hr
- X 96 ▲ 141.7 °C/hr
- ✓ 99 △

UGMS

No

No

- |                   |                                |
|-------------------|--------------------------------|
| ✓ 1 ○             | ✓ 16 △                         |
| - 2 ○             | ✓ 17 △                         |
| ✓ 3 △             | ✓ 18 △                         |
| X 4 ▲ 47.1 °C/hr  | X 19 <del>○</del> △ 44.4 °C/hr |
| X 5 ▲ 46.2 °C/hr  | X 20 ▲ 48.4 °C/hr              |
| ✓ 6 ○             | X 21 △ 35.4 °C/hr              |
| ✓ 7 ○             | X 22 ▲ 51.0 °C/hr              |
| ✓ 8 ○             | 23 ○                           |
| ✓ 9 ○             | 24 ○                           |
| ✓ 10 △            | 25 ○                           |
| X 11 △ 36.1 °C/hr | 26 ○                           |
| X 12 ▲ 55.6 °C/hr | 27 ○                           |
| ✓ 13 ○            | 28 ○                           |
| ✓ 14 △            | 29 ○                           |
| ✓ 15 ○            |                                |

CARBON CO., UTAH

80 90 100 110 120 130 140 150 160

