

Bisti - Carson Unit 1

## DRILLING REPORT

FOR PERIOD ENDING

(FIELD)

San Juan, New Mexico

(COUNTY)

July 26, 1956

24

(SECTION OR LEASE)

T. 25 N., R. 12 W.

(TOWNSHIP OR RANGHO)

DAY 56	DEPTHS		REMARKS
	FROM	TO	
			<p>Location: 660' S. and 660' W. of NE corner, Sec. 24, T. 25 N., R. 12 W., N.M.P.M., San Juan County, New Mexico.</p> <p>Elevations:            DF 6436.02'            Mat 6427.80'            KB 6436.89'</p>
7-19	0	235	<p>Spudded 11:30 PM 7-19-56. Drilled 235'.</p> <p>Ran and cemented 5 joints 8 5/8", 32 #, LT&amp;C casing at 228' with 100 sacks regular cement treated with 2% calcium chloride. Plug down 9:30 AM. Good cement returns to surface. Tested casing and blowout equipment with 700 psi for 15 minutes. OK. Treated mud with caustic, anhydrex and tannex.</p>
7-20 7-25	235	3832	<p>Drilled 3597'. Treated mud with driscose, caustic, anhydrex, tannex and gel.</p>
7-26	3832	4101	<p>Drilled 269, DST #1 3860-3935 Johnston Testers. Ran with two 6-5/8" packers at 3853' and 3860', 1 outside pressure recorders, 1 Johnston "T" at 3932, 1 Amerada at 3922', and 2 Johnston "L" at 3921' and 3917', 3/4" subsurface bean and 1" surface bean. Perforations 3860-3880 and 3905-3935, no water cushion, used 26' (0.13 bbl.) air cushion. Initial shut in 20 min. Tool open 1 hour 30 minutes, final shut in 45 minutes. Moderate flow throughout test decreasing slightly. Recovered 120' (0.6 bbl.) total fluid including: 95' (0.5 bbl.) oil 39° API gravity and 25' (0.1 bbl.) muddy oil (approximately 50% mud). ISIP not recorded, LFP 25, FFP 100, FSIP 1285, (still rising) HP 2120.</p> <p>Tested BOE daily</p>

  

CONDITION AT BEGINNING OF PERIOD			
HOLE		CASING SIZE	DEPTH SET
SIZE	FROM	TO	
DRILL PIPE SIZES		4-1/2"	

  

Mud Summary 7-18/7-26-56

Wt 9.5 to 9.8 lb/gal  
 Visc 38 to 60  
 WL 7.5  
 FC 2/32

**RECEIVED**

001 11 1956

**OIL CON. COM.**

**DIST. 3**

R. D. Allen

SIGNED

## SHELL OIL COMPANY

WELL NO. 1

Bisti - Carson Unit 1

## DRILLING REPORT

FOR PERIOD ENDING

24

(FIELD)  
San Juan, New Mexico

August 8, 1956

(SECTION OR LEASE)  
T. 25 N., R. 12 W.  
(TOWNSHIP OR RANCHO)

DAY 56	DEPTHS		REMARKS
	FROM	TO	
7-27 7-30	4101	4870	<u>Drilled 769'</u> . Treated mud with tannex, caustic, anhydrox, driscose, gel.
7-31	4870	4924	<u>Cored 54'</u> . Core #1 4870-4920. Treated mud with gel.
8-1	4924	4989	<u>Cored 65'</u> . Core #2 4920-4970. Treated mud with anhydrox, caustic and tannex.
8-2	4989	5064	<u>Drilled 44'</u> , <u>Cored 31'</u> , Core #3 4970-5020. Treated mud with tannex, caustic, gel and anhydrox.
8-3 8-4	5064	5395	<u>Drilled 331'</u> . Lost circulation at 5395'. Treated mud with tannex, caustic, anhydrox, driscose and gel.
8-5	5395	5535	<u>Drilled 140'</u> . Pulled 4 stands off bottom conditioned mud with Fibertex, Micatex, tannex and anhydrox, regained circulation.
8-6	5535	5695	<u>Drilled 160'</u> . Treated mud with tannex and caustic.
8-7	5695	5729	<u>Cored 34'</u> . Core #4 5690-5740.
8-8	5729	5811	<u>Cored 11'</u> , <u>Drilled 71'</u> . Treated mud with tannex, caustic and gel.
			Tested BOP daily
			Mud Summary 7-27/8-8-56 Wt 9.4-10.2 Vis 38-56 WL 7.4-9.2 FC 2-3/32

CONDITION AT BEGINNING OF PERIOD				
HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO	8-5/8"	228'
11	0	228		
7 7/8	228	4101		
DRILL PIPE 4-1/2"				
SIZES				

## SHELL OIL COMPANY

WELL NO. 1Bisti - Carson Unit 1

(FIELD)

San Juan, New Mexico

(COUNTY)

## DRILLING REPORT

FOR PERIOD ENDING

August 16, 195624

(SECTION OR LEASE)

T. 25 N., R. 12 W.

(TOWNSHIP OR RANGHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
8-9 8-10	5811	5983 T.D.	<u>Drilled 172'</u> . Treated mud with tannex, caustic, driscose and gel.
8-11	5983	T.D.	Ran Schlumberger Electrical Survey, Microlog. Took 5 sidewall samples.
8-12 8-13			Ran Velocity Survey. Ran and cemented 147 (5955') joints of 5-1/2" 14#, J-55 casing at 5967' with 300 sacks construction cement. Scratch-alizers at 5930', 5860', 4960', 4920' and 4860'. Finished 2:25 PM 8-13-56. Nippled up. Picked up tubing and cleaned out to 5924'. Displaced mud with water.
8-14			Ran McCullough Gamma Ray log with collar locator. Perforated four 1/2" holes /ft., 5879-5885. Made up and ran tester.
			DST #2 5879-5885. Johnston Testers. Ran tester with hook wall packer at 5848', 3 outside pressure recorders, 2 "L" at 5863 and 5859 and 1 Amerada at 5856, 1/2" subsurface bean and 1" surface bean. Perforations 5848-5863. No water or air cushion. Opened 3 hours. Shut in 1 hour 30 minutes.
8-14	5983	T.D.	Immediate faint air blow increasing in moderate in 2 minutes decreasing to faint in 7 minutes, increasing to weak in 15 minutes. Steady weak air blow remainder of test. Recovered 3000 (16.6 bbl.) very slightly gas cut water. Maximum salinity 8,250 ppm (t). Rig, water, nil. IFP 130, FFP 1395, SIP - (tool jammed) HP 2740.
8-15	5983 5100	T.D. BT D	Set bridge plug at 5100'. Capped with 1 sack cement. Displaced water with oil. Perforated with four 1/2" jet holes/foot interval 4875'-4895'. Set production packer at 4852'.
8-16			Began swabbing 2:00 AM, swabbed and flowed an average rate of 21 bbl./hour/oil, cut 3-6%. Gravity 38°API (dry)

## CONDITION AT BEGINNING OF PERIOD

HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
11	0	228	8-5/8"	228'
7-7/8	228	5811		
DRILL PIPE SIZES				
4-1/2"				

R. D. Allen

## SHELL OIL COMPANY

WELL NO. 1

## DRILLING REPORT

FOR PERIOD ENDING

August 19, 1956

Bisti - Carson Unit 1

(FIELD)

San Juan, New Mexico

(COUNTY)

24

(SECTION OR LEASE)

T. 25 N., R. 12 W.

(TOWNSHIP OR RANGHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
8-16	5983	T.D.	<p>Well began Flowing 1:30 PM 8-16-56, 192 B/D rate gross, 185 B/D rate clean, cut 3.5%, CP 200 psi, TP 90 psi, 3/4" bean, gravity 36° API.</p> <p>Stimulation Treatment #1 (Interval 4875-4895) injected 100 barrels crude oil, formation broke at 1800 psi. Treated with 30,000 gallons of oil mixed with 1# sand/gal. first 15,000 gallons and 2# sand/gal. second 15,000 gallons of oil. Average treating pressure 2200 psi, average treating rate 44 bbl./min., overall treating rate 44.4 bbl./min. Overflushed with 100 barrels oil containing 70 gallons free flo.</p> <p>Shut in pressure after fracture treatment 1000 psi. Shut in 12 hours (Total load and fracture oil used: 1245 barrels) Started swabbing 9:00 PM 8-18-56. Started flowing 4:00 AM 8-19-56. Released rig 5:30 AM 8-19-56.</p> <p style="text-align: right;">Production Figures</p> <p>8-18-56, 75 barrels swabbed</p> <p>8-19-56, 262 barrels, started flowing 4:00 AM</p> <p>8-20-56, 539 barrels</p> <p>8-21-56, Shut in</p> <p>8-22-56, Shut in</p> <p>8-23-56, 152 barrels</p> <p>8-24-56, Shut in</p>
8-17	5100	PBTD	
8-18			
8-19			

  

CONDITION AT BEGINNING OF PERIOD				
HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
11	0	228	8-5/8"	228'
7-7/8	228	5983	5-1/2"	5967'
DRILL PIPE SIZES			4-1/2"	

  

Drillers: H. B. Lynn Drilling Company  
H. H. Owens  
Joe Boggs  
J. F. McGee  
J. Justice

R. D. Allen

SIGNED

## DITCH SAMPLES

Examined by \_\_\_\_\_ 0 to 900  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del> NOT LAGGED
0	220	100	No samples.	
220	240	100	<u>Sandstone</u> , white-colorless, coarse-very coarse, sub rounded to well rounded, poorly sorted, slightly calcareous, poorly cemented.	
240	270	50	<u>Sandstone</u> , as above, <u>samples mostly cement</u> .	
		50	<u>Shale</u> , tan, soft, bentonitic, slightly calcareous.	
270	290	100	<u>Sandstone</u> , as above, <u>samples mostly cement</u> .	
290	300	100	<u>Sandstone</u> , pale green, fine-medium, occasionally coarse grained sub rounded-well rounded, poorly sorted, very argillaceous.	
300	310	70	<u>Sandstone</u> , as above.	
		30	<u>Shale</u> , light-medium green, hard, silty in part.	
310	330	100	<u>Shale</u> , light-medium green, soft-medium hard, silty in part.	
330	340	70	<u>Shale</u> , as above, becoming purple in part.	
		30	<u>Sandstone</u> , as above.	
340	380	100	<u>Shale</u> , as above, light green only, bentonitic in part.	
380	410	100	<u>Shale</u> , as above, becoming sandy-very sandy.	
410	590	100	<u>Shale</u> , light green, soft, silty and sandy in part.	
590	600	100	<u>Shale</u> , as above, very sandy, grades to <u>sandstone</u> , very argillaceous in part.	
600	610	100	<u>Sandstone</u> , light-medium green, fine-medium, sub-rounded, poorly sorted.	
610	620	100	<u>Sandstone</u> , as above, becoming tan and slightly calcareous in part.	
620	640	100	<u>Shale</u> , tan, soft, silty, slightly sandy.	
640	650	100	<u>Shale</u> , as above, becoming light-medium green.	
650	700	100	<u>Shale</u> , medium green gray, medium soft, silty in part.	
700	770	100	<u>Shale</u> , as above, becoming medium gray green.	
770	780	100	<u>Sandstone</u> , tan, fine-medium, sub-rounded, poorly sorted, very argillaceous.	
780	850	100	<u>Shale</u> , medium green gray, otherwise as above.	
850	900	100	<u>Shale</u> , as above, with 10-20% dark brown gray Shale.	

## DITCH SAMPLES

Examined by \_\_\_\_\_ 900 to 1200  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del>	NOT LAGGED
900	920	100	<u>Shale</u> , medium dark brown gray, medium soft, silty in part.		
920	950	100	<u>Shale</u> , medium gray green, medium soft, silty in part.		
950	960	50	<u>Sandstone</u> , light brown, fine-very fine, poorly cemented, argillaceous.		
		20	<u>Coal</u> .		
		30	<u>Shale</u> , light green-brown, silty in part.		
960	980	100	<u>Shale</u> , medium gray green-dark gray brown, medium soft, silty in part.		
980	990	80	<u>Shale</u> , light gray brown with occasional inclusions of <u>coal</u> .		
		20	<u>Coal</u>		
990	1000	100	<u>Shale</u> , as above.		
1000	1010	90	<u>Shale</u> , light gray brown, soft bentonitic in part.		
		10	<u>Coal</u> .		
1010	1020	100	<u>Shale</u> , as above, becoming tan in part.		
1020	1030	100	<u>Shale</u> , light green and brown, soft.		
1030	1040	100	<u>Shale</u> , light green gray-tan silty in part, soft.		
1040	1060	100	<u>Shale</u> , tan, soft, bentonitic.		
1060	1070	70	<u>Shale</u> , as above.		
		30	<u>Sandstone</u> , tan, fine-medium, sub-rounded, finely sorted, poorly cemented.		
1070	1080	100	<u>Sandstone</u> , as above.		
1080	1100	60	<u>Sandstone</u> , as above.		
		40	<u>Shale</u> , light gray brown, silty in part.		
1100	1110	100	<u>Shale</u> , tan, soft, bentonitic in part.		
1110	1130	100	<u>Shale</u> , tan, light green, light gray, silty in part.		
1130	1170	100	<u>Shale</u> , tan, soft, silty in part.		
1170	1180	100	<u>Shale</u> , brown, very soft.		
1180	1200	100	<u>Shale</u> , tan, soft, slightly bentonitic, slightly calcareous.		

## DITCH SAMPLES

Examined by \_\_\_\_\_ 1200 to 1420  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LOGGED</del>	NOT LAGGED
1200	1210	80	<u>Shale</u> , medium gray and tan, soft, silty in part.		
		20	<u>Sandstone</u> , tan, fine-coarse, sub-rounded, poorly sorted, slightly calcareous with abundant rock fragment inclusions.		
1210	1230	100	<u>Shale</u> , tan, very soft, slightly bentonitic.		
1230	1240	50	<u>Shale</u> , brown-gray brown, soft, splintery.		
		50	<u>Coal</u> .		
1240	1250	100	<u>Sandstone</u> , cream, medium-fine, sub-well rounded, tight calcareous, glauconitic.		
1250	1260	50	<u>Sandstone</u> , as above.		
		30	<u>Coal</u> .		
		20	<u>Shale</u> , brown, soft, carbonaceous.		
1260	1270	100	<u>Sandstone</u> , white, medium-coarse, well rounded, fair sorting, slightly bentonitic?, poorly cemented.		
1270	1290	100	<u>Sandstone</u> , as above, becoming medium-fine.		
1290	1300	60	<u>Shale</u> , tan, very soft.		
		40	<u>Sandstone</u> , as above.		
1300	1320	100	<u>Sandstone</u> , white-light green gray, fine-medium, sub-rounded, argillaceous, glauconitic, poorly cemented.		
1320	1330	100	<u>Sandstone</u> , tan, very fine-fine, very argillaceous, calcareous, poorly cemented.		
1330	1340	100	<u>Shale</u> , tan, soft, calcareous, silty.		
1340	1350	100	<u>Sandstone</u> , light tan, fine-medium, sub-rounded, very argillaceous, calcareous, poorly cemented.		
1350	1370	100	<u>Sandstone</u> , as above, slightly-non calcareous.		
1370	1390	100	<u>Sandstone</u> , as above, calcareous.		
1390	1400	75	<u>Shale</u> , tan, soft, calcareous, sandy.		
		25	<u>Sandstone</u> , as above.		
1400	1420	100	<u>Sandstone</u> , light tan, fine-medium, well rounded, fairly sorted, calcareous, occasional dark rock fragments.		

## DITCH SAMPLES

Examined by 1420 to 1890  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del> NOT LAGGED
1420	1430	100	<u>Shale</u> , tan-dark brown, soft, slightly calcareous in part.	
1430	1440	75	<u>Shale</u> , as above.	
		25	<u>Sandstone</u> , white, fine-coarse, sub-rounded, poorly sorted, calcareous.	
1440	1450	100	<u>Shale</u> , as above.	
1450	1470	80	<u>Shale</u> , as above.	
		20	<u>Sandstone</u> , tan, very fine-fine, well sorted, calcareous.	
1470	1480	100	<u>Limestone</u> , tan, I-III VFA, silty in part.	
1480	1500	100	<u>Sandstone</u> , tan, very fine, grades to <u>siltstone</u> , in part, slightly calcareous, very argillaceous.	
1500	1510	100	<u>Shale</u> , light green, tan, brown, soft, silty in part.	
1510	1550	65	<u>Shale</u> , as above.	
		35	<u>Sandstone</u> , as above.	
1550	1590	100	<u>Shale</u> , medium gray and dark brown, soft, silty and micaceous in part.	
1590	1600	60	<u>Shale</u> , as above.	
		40	<u>Sandstone</u> , tan, very fine-fine, sub-rounded, fair sorting.	
1600	1620	100	<u>Shale</u> , as above.	
1620	1670	100	<u>Shale</u> , as above, becoming tan and dark brown.	
1670	1680	60	<u>Shale</u> , as above.	
		40	<u>Sandstone</u> , white-tan, fine-medium, sub-rounded, poorly sorted, calcareous.	
1680	1690	100	<u>Shale</u> , as above.	
1690	1740	100	<u>Sandstone</u> , tan, medium-fine, sub rounded, good sorting, slightly micaceous, appears porous, contains dark rock fragments.	
1740	1760	100	<u>Sandstone</u> , white-tan, very fine-medium, sub rounded, poorly sorted, argillaceous, calcareous, with dark rock fragments.	
1760	1770	100	<u>Sandstone</u> , tan, fine-medium, sub rounded, well sorted, slightly micaceous, calcareous in part with dark rock fragments, appears porous.	
1770	1890	100	<u>Sandstone</u> , as above, argillaceous in part, porous in part, poor-well sorted.	



## DITCH SAMPLES

Examined by \_\_\_\_\_ 1890 to 2230  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES	<del>LAGGED</del>	NOT LAGGED
1890	1900	100	<u>Sandstone</u> , as above, becoming calcareous.			
1900	1910	100	<u>Sandstone</u> , as above, very argillaceous.			
1910	1940	100	<u>Shale</u> , medium-dark gray brown, soft, blocky, carbonaceous in part.			
1940	1950	60	<u>Shale</u> , as above.			
		40	<u>Sandstone</u> , tan, very fine-medium, poorly sorted, argillaceous.			
1950	1980	100	<u>Sandstone</u> , tan, fine-medium, sub rounded, fair-poorly sorted with dark rock fragments, calcareous in part.			
1980	2020	60	<u>Shale</u> , light-dark brown, soft, blocky.			
		40	<u>Sandstone</u> , as above, becoming coarse in part. Tr. coal.			
2020	2060	100	<u>Shale</u> , light-dark gray brown, soft, blocky, carbonaceous in part.			
2060	2070	80	<u>Shale</u> , as above.			
		20	<u>Coal</u> , low grade.			
2070	2130	100	<u>Shale</u> , dark gray brown, carbonaceous. Tr. coal.			
2130	2150	90	<u>Shale</u> , as above.			
		10	<u>Coal</u> .			
2150	2170	100	<u>Shale</u> , medium-dark gray brown, carbonaceous.			
2170	2180	70	<u>Shale</u> , as above.			
		30	<u>Coal</u> .			
2180	2200	100	<u>Shale</u> , as above.			
2200	2210	60	<u>Shale</u> , as above.			
		40	<u>Coal</u> , as above.			
2210	2220	100	<u>Shale</u> , as above.			
2220	2230	70	<u>Shale</u> , as above.			
		30	<u>Sandstone</u> , white-tan, fine-medium, sub rounded, fair sorting, calcareous in part with abundant dark rock fragments.			

## DITCH SAMPLES

Examined by \_\_\_\_\_ 2230 to 2500  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del> NOT LAGGED
2230	2250	50	<u>Shale</u> , as above.	
		50	<u>Sandstone</u> , as above.	
2250	2260	60	<u>Shale</u> , light brown, very soft.	
		40	<u>Sandstone</u> , as above.	
2260	2270	100	<u>Coal</u> .	
2270	2280	60	<u>Coal</u> .	
		40	<u>Shale</u> , light brown, very soft.	
2280	2300	100	<u>Shale</u> , light-medium brown, blocky, carbonaceous.	
2300	2310	100	<u>Shale</u> , as above.	
2310	2320	80	<u>Shale</u> , medium green gray, soft, blocky.	
		20	<u>Coal</u> .	
2320	2330	100	<u>Shale</u> , as above.	
2330	2350	75	<u>Shale</u> , tan-medium brown, blocky, carbonaceous.	
		25	<u>Coal</u> .	
2350	2390	100	<u>Coal</u> .	
2390	2400	25	<u>Coal</u> .	
		75	<u>Shale</u> , as above.	
2400	2410	100	<u>Shale</u> , medium-dark brown, soft, blocky, carbonaceous.	
2410	2420	30	<u>Coal</u> .	
		70	<u>Shale</u> , as above.	
2420	2430	100	<u>Shale</u> , as above.	
2430	2450	20	<u>Coal</u> .	
		80	<u>Shale</u> , as above.	
2450	2460	100	<u>Shale</u> , as above.	
2460	2500	25	<u>Coal</u> .	

## DITCH SAMPLES

Examined by \_\_\_\_\_ 2500 to 2750  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del> NOT LAGGED
		75	<u>Shale</u> , as above.	
2500	2540	100	<u>Shale</u> , as above.	
2540	2550	70	<u>Shale</u> , as above.	
		30	<u>Coal</u> .	
2550	2570	100	<u>Shale</u> , as above.	
2570	2580	50	<u>Sandstone</u> , white-tan, fine-medium, sub rounded, fair sorting.	
		50	<u>Shale</u> , as above.	
2580	2590	100	<u>Shale</u> , as above.	
2590	2600	70	<u>Shale</u> , as above.	
		30	<u>Coal</u> .	
2600	2610	25	<u>Sandstone</u> , as above.	
		75	<u>Shale</u> , as above, silty.	
2610	2620	100	<u>Sandstone</u> , tan, very fine-fine, sub angular, fair sorting, slightly calcareous with occasional dark rock fragments, appears non-porous.	
2620	2630	100	<u>Sandstone</u> , as above, becoming medium fine in part.	
2630	2640	100	<u>Shale</u> , as above, silty in part.	
2640	2670	100	<u>Sandstone</u> , as above, non calcareous.	
2670	2690	100	<u>Sandstone</u> , as above, becoming medium-coarse, sub rounded in part.	
2690	2700	100	<u>Coal</u> .	
2700	2710	100	<u>Shale</u> , tan, silty, carbonaceous.	
2710	2720	30	<u>Coal</u> .	
		70	<u>Shale</u> , tan-brown, carbonaceous.	
2720	2730	50	<u>Coal</u> .	
		50	<u>Shale</u> , as above.	
2730	2750	60	<u>Sandstone</u> , cream-tan, fine-coarse, sub rounded, poorly sorted, carbonaceous in part.	
		40	<u>Shale</u> , as above.	

## DITCH SAMPLES

Examined by \_\_\_\_\_ 2750 to 2990  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del> NOT LAGGED
2750	2760	100	<u>Shale</u> , tan, soft, silty and calcareous in part.	
2760	2780	20	<u>Coal</u> .	
		80	<u>Shale</u> , as above, tan-brown, carbonaceous.	
2780	2810	100	<u>Shale</u> , as above, predominantly brown.	
2810	2820	20	<u>Coal</u> .	
		80	<u>Shale</u> , as above.	
2820	2840	100	<u>Shale</u> , tan, carbonaceous.	
2840	2860	100	<u>Shale</u> , brown-tan, carbonaceous.	
2860	2870	20	<u>Coal</u> .	
		80	<u>Shale</u> , as above.	
2870	2880	100	<u>Shale</u> , as above.	
2880	2890	25	<u>Coal</u> .	
		75	<u>Shale</u> , as above.	
2890	2900	100	<u>Shale</u> , as above.	
2900	2910	50	<u>Coal</u> .	
		50	<u>Shale</u> , as above.	
2910	2920	30	<u>Sandstone</u> , as above.	
		70	<u>Shale</u> , as above.	
2920	2930	100	<u>Shale</u> , as above.	
2930	2960	100	<u>Sandstone</u> , white-cream, fine-coarse, sub rounded, poorly sorted with abundant miscellaneous rock fragments.	
2960	2970	25	<u>Sandstone</u> , as above.	
		75	<u>Shale</u> , as above.	
2970	2980	100	<u>Sandstone</u> , as above.	
2980	2990	100	<u>Shale</u> , as above.	

## DITCH SAMPLES

Examined by \_\_\_\_\_ 2990 to 3250  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del>	NOT LAGGED
2990	3000	100	<u>Sandstone</u> , cream-tan, fine-coarse, sub-well rounded, fair-poorly sorted, porous in part, with occasional miscellaneous rock fragments.		
3000	3010	40	<u>Sandstone</u> , white-tan, fine-medium, sub angular-sub rounded, fair-poorly sorted.		
		60	<u>Shale</u> , tan-brown, silty in part, carbonaceous in part.		
3010	3040	30	<u>Sandstone</u> , as above.		
		70	<u>Shale</u> , brown, carbonaceous, silty in part.		
3040	3050	100	<u>Shale</u> , as above.		
3050	3070	30	<u>Sandstone</u> , as above.		
		70	<u>Shale</u> , as above.		
3070	3080	20	<u>Sandstone</u> , as above.		
		80	<u>Shale</u> , as above.		
3080	3090	100	<u>Shale</u> , as above.		
3090	3100	40	<u>Sandstone</u> , as above.		
		60	<u>Shale</u> , as above.		
3100	3120	30	<u>Sandstone</u> , as above.		
		70	<u>Shale</u> , as above.		
3120	3170	100	<u>Shale</u> , as above.		
3170	3190	100	<u>Sandstone</u> , as above, coarse in part.		
3190	3210	100	<u>Shale</u> , as above.		
3210	3220	25	<u>Coal</u> .		
		75	<u>Shale</u> , as above.		
3220	3230	40	<u>Sandstone</u> , as above.		
		60	<u>Shale</u> , as above.		
3230	3250	25	<u>Coal</u> .		
		40	<u>Sandstone</u> , as above.		
		35	<u>Shale</u> , as above.		

## DITCH SAMPLES

Examined by \_\_\_\_\_ 3250 to 3490  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del>	NOT LAGGED
3250	3310	100	<u>Shale</u> , as above.		
3310	3320	100	<u>Sandstone</u> , tan, very fine-medium, argillaceous.		
3320	3330	30	<u>Sandstone</u> , as above.		
		70	<u>Shale</u> , as above.		
3330	3340	50	<u>Shale</u> , tan, very soft, bentonitic.		
		50	<u>Coal</u> .		
3340	3350	30	<u>Sandstone</u> , as above.		
		70	<u>Shale</u> , brown carbonaceous, silty in part.		
3350	3360	100	<u>Shale</u> , as above.		
3360	3370	40	<u>Sandstone</u> , white-tan, fine-medium, sub-angular-sub rounded, poor sorting.		
		60	<u>Shale</u> , medium-dark brown, carbonaceous, silty in part.		
3370	3390	50	<u>Sandstone</u> , as above, argillaceous.		
		50	<u>Shale</u> , as above.		
3390	3400	100	<u>Sandstone</u> , as above, argillaceous in part.		
3400	3420	100	<u>Sandstone</u> , cream, medium-coarse, sub angular, <del>poorly</del> sorted, argillaceous, slightly calcareous, with abundant miscellaneous rock fragments, slightly glauconitic.		
3420	3440	35	<u>Sandstone</u> , as above.		
		65	<u>Shale</u> , as above.		
3440	3450	20	<u>Coal</u> .		
		80	<u>Sandstone</u> , as above.		
3450	3470	40	<u>Sandstone</u> , as above.		
		20	<u>Coal</u> .		
		40	<u>Shale</u> , as above.		
3470	3490	40	<u>Sandstone</u> , as above.		
		60	<u>Shale</u> , as above.		

## DITCH SAMPLES

Examined by \_\_\_\_\_ 3490 to 3640  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>XXXXX</del> NOT LAGGED
3490	3510	100	<u>Shale</u> , as above.	
3510	3520	75	<u>Coal</u> .	
		25	<u>Shale</u> , tan-light gray, carbonaceous.	
3520	3530	50	<u>Coal</u> .	
		50	<u>Shale</u> , as above.	
3530	3550	100	<u>Shale</u> , as above, silty in part.	
3550	3560	20	<u>Coal</u> .	
		30	<u>Sandstone</u> , as above, fine-medium.	
		50	<u>Shale</u> , as above.	
3560	3570	100	<u>Sandstone</u> , white-cream, medium-fine, sub-rounded, poorly sorted, calcareous in part, with occasional dark rock fragments.	
3570	3580	60	<u>Sandstone</u> , as above.	
		40	<u>Shale</u> , as above.	
3580	3590	25	<u>Sandstone</u> , as above.	
		75	<u>Shale</u> , tan-medium brown, silty in part, slightly carbonaceous.	
3590	3600	40	<u>Sandstone</u> , as above.	
		60	<u>Shale</u> , as above.	
3600	3610	50	<u>Sandstone</u> , white, fine-medium, (occasionally coarse) sub angular-sub rounded, poorly sorted, calcareous in part, with abundant miscellaneous rock fragments.	
		25	<u>Shale</u> , medium-dark brown, carbonaceous.	
		25	<u>Coal</u> .	
3610	3620	40	<u>Coal</u> .	
		60	<u>Sandstone</u> , as above.	
3620	3630	25	<u>Coal</u> .	
		50	<u>Sandstone</u> , as above.	
		25	<u>Shale</u> , as above.	
3630	3640	65	<u>Coal</u> .	
		35	<u>Sandstone</u> , as above.	

## DITCH SAMPLES

Examined by 3640 to 3870  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del>	NOT LAGGED
3640	3650	35	<u>Sandstone</u> , as above.		
		65	<u>Shale</u> , as above, silty in part.		
3650	3660	60	<u>Sandstone</u> , as above.		
		40	<u>Shale</u> , as above.		
3660	3670	50	<u>Sandstone</u> , as above.		
		25	<u>Shale</u> , as above.		
		25	<u>Coal</u> .		
3670	3680	100	<u>Shale</u> , as above.		
3680	3690	40	<u>Sandstone</u> , as above, becoming tan, very fine-fine in part.		
		30	<u>Shale</u> , as above.		
		30	<u>Coal</u> .		
3690	3710	25	<u>Sandstone</u> , as above.		
		25	<u>Coal</u> .		
		50	<u>Shale</u> , as above.		
3710	3720	50	<u>Coal</u> .		
		25	<u>Sandstone</u> , as above.		
		25	<u>Shale</u> , as above.		
3720	3730	40	<u>Coal</u> .		
		60	<u>Shale</u> , as above.		
3730	3750	100	<u>Coal</u> .		
3750	3800	100	<u>Sandstone</u> , white-light gray, fine-medium, (occasionally coarse), sub rounded, <del>fine-poorly</del> sorted, occasional dark rock fragments, glauconitic? slightly micaceous in part.		
3800	3840	100	<u>Sandstone</u> , white-light gray, as above.		
3840	3850	100	<u>Sandstone</u> , as above, <u>1% pale. yellow fluorescence, yellow cut fluorescence.</u>		
3850	3870	100	<u>Sandstone</u> , as above.		



## DITCH SAMPLES

Examined by \_\_\_\_\_ 3870 to 4220  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del> NOT LAGGED
3870	3900	100	<u>Sandstone</u> , light gray-tan, fine, fair-good sorting, sub angular-sub rounded, occasionally very fine dark rock fragments, rare medium <u>glauconitic?</u> , appears slightly porous, calcareous in part, 70-80% uniform golden yellow fluorescence and bright yellow cut fluorescence when sample crushed.	
3900	3930	100	<u>Sandstone</u> , as above, becoming tan-brown, 40% uniform yellow fluorescence, bright yellow cut fluorescence.	
3930	3960	100	<u>Shale</u> , dark gray-black, slightly carbonaceous, silty in part, splintery-blocky. Samples very poor.	
3960	3980	60	<u>Sandstone</u> , medium gray, very fine-fine, fairly sorted, slightly micaceous.	
		40	<u>Shale</u> , as above.	
3980	3990	60	<u>Shale</u> , as above.	
		40	<u>Sandstone</u> , as above.	
3990	4000	100	<u>Shale</u> , as above. Samples becoming fair to good.	
4000	4020	60	<u>Siltstone</u> , medium-dark gray.	
		40	<u>Shale</u> , as above.	
4020	4040	100	<u>Siltstone</u> , as above, grades to <u>Shale</u> , silty in part.	
4040	4100	100	<u>Shale</u> , as above.	
4100	4120	100	<u>Shale</u> , as above, but silty.	
4120	4150	100	<u>Siltstone</u> , as above.	
4150	4160	60	<u>Siltstone</u> , as above.	
		40	<u>Shale</u> , as above.	
4160	4180	100	<u>Siltstone</u> , as above, grades to <u>Sandstone</u> , very fine in part.	
4180	4190	100	<u>Shale</u> , as above.	
4190	4200	60	<u>Shale</u> , as above.	
		40	<u>Siltstone</u> , as above.	
4200	4220	100	<u>Siltstone</u> , as above, becoming slightly calcareous.	

## DITCH SAMPLES

Examined by \_\_\_\_\_ 4220 to 4570  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del> NOT LAGGED
L220	4230	60	<u>Siltstone</u> , as above.	
		40	<u>Shale</u> , as above.	
L230	4320	100	<u>Siltstone</u> , as above, with inoceramas prism at 70-80'.	
L320	4330	60	<u>Shale</u> , as above.	
		40	<u>Siltstone</u> , as above.	
4330	4360	100	Siltstone, as above.	
L360	4380	100	<u>Shale</u> , as above.	
4380	4390	100	<u>Siltstone</u> , as above.	
4390	4400	100	<u>Shale</u> , as above.	
4400	4470	100	<u>Shale</u> , dark-medium gray, irregular blocky, silty in part.	
4470	4480	70	<u>Sandstone</u> , white, very fine-fine, sub rounded, fair sorting, slightly calcareous.	
		30	<u>Shale</u> , as above.	
4480	4560	100	<u>Shale</u> , as above.	
4560	4590	100	<u>Sandstone</u> , light gray, very fine-fine, sub rounded, fair sorting, slightly calcareous.	
4590	4600	70	<u>Shale</u> , as above.	
		30	<u>Sandstone</u> , as above.	
4600	4610	60	<u>Shale</u> , as above.	
		40	<u>Sandstone</u> , as above.	
4610	4620	100	<u>Shale</u> , as above.	
4620	4640	75	<u>Shale</u> , as above. Samples becoming poor.	
		25	<u>Sandstone</u> , as above.	
4640	4650	100	<u>Shale</u> , as above.	
4650	4670	70	<u>Sandstone</u> , as above.	
		30	<u>Shale</u> , as above.	

## DITCH SAMPLES

Examined by \_\_\_\_\_ 4670 to 4870  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>828300</del> NOT LAGGED
4670	4740	100	<u>Shale</u> , as above. Samples very poor.	
4740	4750	40	<u>Sandstone</u> , as above.	
		60	<u>Shale</u> , as above.	
4750	4780	100	<u>Shale</u> , as above, becoming medium-light gray.	
4780	4790	100	<u>Sandstone</u> , tan, fine-very fine, sub rounded-sub angular, good-fair sorting slightly calcareous, appears slightly porous. <u>10-15% bright yellow uniform fluorescence, yellow cut fluorescence, bright yellow cut fluorescence when sample is crushed.</u>	
4790	4800	70	<u>Sandstone</u> , as above.	
		30	<u>Shale</u> , as above.	
4800	4810	50	<u>Sandstone</u> , as above, calcareous.	
		50	<u>Shale</u> , as above.	
4810	4830	100	<u>Shale</u> , dark gray-medium brown gray, flaky-splintery, silty in part.	
4830	4850	25	<u>Sandstone</u> , as above.	
		75	<u>Shale</u> , as above.	
4850	4860	100	<u>Shale</u> , as above, predominantly medium gray brown.	
4860	4870	100	<u>Shale</u> , as above.	

## SHELL OIL COMPANY

Carson

WEEK ENDING

AREA OR FIELD

CORE FROM 4870 TO 4920

## CORE RECORD

COMPANY San Juan County, New Mexico

CORES EXAMINED BY

LEASE AND WELL NO.

1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE	
							INDICATIONS OIL-GAS	CORE OR DITCH
1	4870	4920	50'					
	4870	4871	1'	<u>Shale</u> , dark gray, hard, thinly bedded-massive.				See Description
	4871	4873	2'	<u>Sandstone</u> , light gray, fine-medium, sub rounded, fair sorting, slightly calcareous, appears non porous, with abundant thin interbeds of <u>shale</u> .				
	4873	4875	2'	<u>Sandstone</u> , as above, calcareous, with irregular masses of solid hydrocarbon to 1".				
	4875	4877	2'	<u>Sandstone</u> , tan, fine-coarse, sub rounded, poorly sorted, slightly calcareous, argillaceous, glauconitic with occasional argillaceous thin partings.				
	4877	4878	1'	<u>Sandstone</u> , as above, with occasional very coarse pebbles, appears slightly porous, spotty bright yellow fluorescence, yellow cut fluorescence, <u>uniform oil staining</u> .				
	4878	4879	1'	<u>Sandstone</u> , tan-light brown, medium-coarse, sub rounded, well sorted, slightly calcareous, very friable, very porous, <u>uniform 100% bright yellow fluorescence, slightly bleeding oil</u> .				
	4879	4883	4'	<u>Sandstone</u> , as above, with black and brown rock fragments, <u>shows as above</u> .				
	4883	4884	1'	<u>Sandstone</u> , as above, non calcareous, rare large carbonaceous wood fragments, <u>shows as above</u> .				
	4884	4892	8'	<u>Sandstone</u> , as above, with few-abundant black argillaceous stringers and blobs, <u>shows as above</u> .				
	4892	4894	2'	<u>Sandstone</u> , as above, becoming argillaceous with argillaceous stringers and blobs, <u>shows as above</u> .				
	4894	4899	5'	<u>Sandstone</u> , as above, slightly argillaceous, slightly friable, good sorting, porous, <u>shows as above</u> .				

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).  
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

## SHELL OIL COMPANY

Carson

WEEK ENDING \_\_\_\_\_

AREA OR FIELD \_\_\_\_\_

## CORE RECORD

COMPANY San Juan County, New Mexi

CORE FROM \_\_\_\_\_ TO \_\_\_\_\_

LEASE AND WELL NO 1

CORES EXAMINED BY \_\_\_\_\_

O.	FROM	TO	RECOV- ERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE	
							INDICATIONS OIL - GAS	CORE OR DITCH
1	Cont'd							
	4899	4902	3'	Sandstone, tan, very fine-large, poor-fair sorting, argillaceous to very argillaceous, calcareous, poor-no porosity, no fluorescence, with carbonaceous specks and blobs, <u>spotty dead oil stain</u> .				See Description
	4902	4905	3'	Sandstone, as above, slightly calcareous.				
	4905	4907	2'	Sandstone, tan, very fine-fine, good sorting, very argillaceous, with <u>spotty dead oil stain</u> , no fluorescence.				
	4907	4911	4'	Sandstone, like 4899-4902'.				
	4911	4912	1'	Sandstone, white-tan, fine-coarse, sub angular, poor sorting, very argillaceous in irregular patches, otherwise non argillaceous, calcareous, glauconitic.				
	4912	4916	4'	Sandstone, tan, fine-large, sub rounded, fair-poor sorting, argillaceous, calcareous, glauconitic.				
	4916	4918	2'	Sandstone, as above, with <u>spotty dead oil stain</u> .				
	4918	4920	2'	Sandstone, tan, fine, fair sorting, argillaceous in irregular patches, slightly calcareous, glauconitic.				

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).  
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

WEEK ENDING

CORE FROM 4920 TO 4970

SHELL OIL COMPANY

AREA OR FIELD Carson

COMPANY San Juan County, New Mexi

## CORE RECORD

CORES EXAMINED BY

LEASE AND WELL NO.

1

O.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS	
							OIL - GAS	CORE OR DITCH
2	4920	4970	50'					
	4920	4922	2'	<u>Sandstone</u> , tan, fine-very fine, sub angular, fair-good sorting, slightly calcareous, glauconitic, argillaceous with abundant shale partings and inclusions, dark gray, micaceous in part.				
	4922	4932	10'	<u>Sandstone</u> , as above, calcareous in part, occasionally coarse quartz grains, fair-poor sorting with occasional inclusions carbonaceous and solid hydrocarbon material.				
	4932	4933	1'	<u>Sandstone</u> , tan, fine-medium, sub angular, fair sorting, calcareous, glauconitic argillaceous with shale partings and inclusions as above.				
	4933	4934	1'	<u>Sandstone</u> , as above, slightly calcareous.				
	4934	4935	1'	<u>Shale</u> , medium gray, hard, massive, micaceous.				
	4935	4936	1'	<u>Sandstone</u> , as above, not glauconitic.				
	4936	4940	4'	<u>Sandstone</u> , as above, calcareous in part, occasionally coarse quartz grains, fair-poor sorting, with occasional carbonaceous and solid hydrocarbon specks.				
	4940	4942	2'	<u>Sandstone</u> , as above, glauconitic.				
	4942	4943	1'	<u>Sandstone</u> , as above, medium brown, very argillaceous.				
	4943	4944		<u>Sandstone</u> , at 4940-4942, becoming very fine-medium, fair sorting.				
	4946	4947	1'	<u>Sandstone</u> , tan-brown, fine-coarse, sub rounded, poor sorting, calcareous, glauconitic, argillaceous-very argillaceous with shale partings & inclusions as above, with solid hydrocarbon filling 45° fractures, fossiliferous.				
	4947	4952	5'	<u>Sandstone</u> , white-tan, spotted brown, fine-medium, sub rounded, fair sorting, calcareous, glauconitic, with shale parting & inclusions as above.				

See  
Description

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-80%). 3-SAND WITH SHALE STREAKS (SAND 80-90%). S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

## SHELL OIL COMPANY

AREA OR FIELD CarsonCOMPANY San Juan County, New Mexico

WEEK ENDING \_\_\_\_\_

CORE FROM \_\_\_\_\_ TO \_\_\_\_\_

## CORE RECORD

CORES EXAMINED BY \_\_\_\_\_

LEASE AND WELL NO. 1

O.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS	
							OIL-GAS	CORE OR DITCH
2	Cont'd							
	4952	4958	6'	Sandstone, as above, brown, spottily very argillaceous, slightly glauconitic.				See Description
	4958	4959	1'	Sandstone, as at 4947-4952, slightly glauconitic.				
	4959	4960	1'	Sandstone, as above, fossiliferous.				
	4960	4960.5	.5'	Shale, as above.				
	4960.5	4970	9.5'	Sandstone, light brown, spotted dark brown, fine-medium, fair-good sorting, spottily argillaceous, slightly glauconitic, slightly porous, slightly friable, uniform oil stain, strong petroleum odor, pale green yellow uniform fluorescence and cut fluorescence.				

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-50%). 3-SAND WITH SHALE STREAKS (SAND 50-90%). S-SAND (90-100%).  
 NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

WEEK ENDING

CORE FROM 4970 TO 5020

SHELL OIL COMPANY

AREA OR FIELD Carson

COMPANY San Juan County, New Mexico

## CORE RECORD

CORES EXAMINED BY

LEASE AND WELL NO. 1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS	
							OIL-GAS	CORE OR DITCH
3	4970	5020	50'					
	4970	4975	5'	Sandstone, tan, spotted brown, fine-occasional medium, sub angular, fair-well sorting, slightly porous, spottily argillaceous with occasionally thin stringers black micaceous shale, strong petroleum odor, uniform green yellow fluorescence and cut fluorescence.				See Description
	4975	4978	3'	Sandstone, as above, very spottily argillaceous, spotty fluorescence as above, no odor.				
	4978	4980	2'	Sandstone, like 4970-4975, slightly glauconitic, shows as 4970-4975.				
	4980	4986	6'	Sandstone, as above, spotty-uniform white fluorescence, weak cut fluorescence strong cut fluorescence when crushed, strong petroleum odor.				
	4986	4990	4'	Sandstone, as 4980-4986, shows as 4980-4986, becoming strong cut fluorescence.				
	4990	4991	1'	Sandstone, as above, shows as above, becoming weak cut fluorescence, strong cut fluorescence when crushed.				
	4991	4993	2'	Sandstone, as above, becoming very spottily argillaceous with abundant shale stringers and inclusions, spotty white fluorescence and cut fluorescence.				
	4993	4995	2'	Sandstone, as above, becoming very fine-fine, fair-poor sorting, shows as above.				
	4995	5004	9'	Sandstone, as above, becoming very argillaceous, more shale stringers and inclusions, slightly calcareous, no shows.				
	5004	5006	2'	Sandstone, tan, fine-medium, sub angular, fair-poor sorting, spottily very argillaceous, slightly calcareous with thin shale partings and inclusions dark gray shale, spotty faint white fluorescence and cut fluorescence, faint petroleum odor.				

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.



## SHELL OIL COMPANY

AREA OR FIELD CarsonCOMPANY San Juan County, New Mexico

WEEK ENDING \_\_\_\_\_

CORE FROM \_\_\_\_\_ TO \_\_\_\_\_

## CORE RECORD

CORES EXAMINED BY \_\_\_\_\_

LEASE AND WELL NO. 1

O.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL-GAS	CORE OR DITCH
3	Cont'd							See Description
	5006	5007	1'	Sandstone, as above, <u>spotty yellow fluorescence, strong cut fluorescence, faint petroleum odor.</u>				
	5007	5009	2'	Sandstone, light brown, fine, fair sorting, <u>spottily argillaceous, spotty faint white fluorescence, cut fluorescence when crushed, faint petroleum odor.</u>				
	5009	5010	1'	Sandstone, as above, with occasionally thin <sup>SHALE</sup> white partings and inclusions, shows as above.				
	5010	5011	1'	Sandstone, 5007-5009, faint spotty fluorescence, weak cut fluorescence, strong cut fluorescence when crushed, faint petroleum odor.				
	5011	5013	2'	Sandstone, as above, with occasionally thin shale partings & inclusions, faint spotty fluorescence, faint cut fluorescence, when crushed, faint petroleum odor.				
	5013	5014	1'	Sandstone, tan, brown in spots, and streaks, very fine-fine, fair sorting, argillaceous-very argillaceous, slightly calcareous, no shows.				
	5014	5020	6'	Sandstone, as above, with thin shale partings and inclusions.				

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%), 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%), 2-CLAY OR SHALE AND SAND (SAND 25-60%), 3-SAND WITH SHALE STREAKS (SAND 60-90%), S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

## DITCH SAMPLES

Examined by \_\_\_\_\_ 5020 to 5500  
\_\_\_\_\_ to \_\_\_\_\_Well \_\_\_\_\_ Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES	<del>LAGGED</del>	NOT LAGGED
5020	5150	100	<u>Shale</u> , medium gray, slightly silty, minutely carbonaceous-green shale, probably caving.			
5150	5230	100	<u>Shale</u> , medium gray, minutely carbonaceous.			
5230	5240	100	<u>Shale</u> , dark gray.			
5240	5250	50	<u>Siltstone</u> , light gray.			
		50	<u>Shale</u> , medium gray.			
5250	5260	100	<u>Shale</u> , medium gray, silty, carbonaceous.			
5260	5270	70	<u>Shale</u> , as above.			
		30	<u>Sandstone</u> , pale gray, very fine, angular, well sorted, calcareous.			
5270	5280	60	<u>Shale</u> , as above.			
		40	<u>Sandstone</u> , as above.			
5280	5290	100	<u>Shale</u> , medium gray, carbonaceous.			
5290	5300	90	<u>Shale</u> , as above.			
		10	<u>Sandstone</u> , as above.			
5300	5310	50	<u>Shale</u> , as above.			
		50	<u>Sandstone</u> , as above.			
5310	5320	70	<u>Shale</u> , as above.			
		30	<u>Sandstone</u> , as above.			
5320	5350	100	<u>Shale</u> , medium gray, carbonaceous.			
5350	5370	100	<u>Shale</u> , as above, silty.			
5370	5390	100	<u>Shale</u> , dark gray, fissile.			
5390	5400	100	<u>No sample</u> , lost circulation at 5395'.			
5400	5430	100	<u>Shale</u> , as above.			
5430	5450	100	<u>Shale</u> , dark gray.			
5450	5500	100	<u>No samples</u> , due to lost circulation material in mud.			

## DITCH SAMPLES

Examined by \_\_\_\_\_ 5500 to 5690  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del> NOT LAGGED
5500	5510	100	<u>Shale</u> , as above.	
5510	5520	100	<u>Shale</u> , as above, with very fine partings of fine <u>Sandstone</u> .	
5520	5530	60	<u>Shale</u> , dark gray.	
		40	<u>Sandstone</u> , medium gray, very fine.	
5530	5540	50	<u>Shale</u> , as above.	
		50	<u>Sandstone</u> , as above.	
5540	5560	100	<u>Shale</u> , dark gray.	
5560	5570		Skip.	
5570	5590	100	<u>Shale</u> , as above.	
5590	5600	100	<u>Shale</u> , medium-dark gray, slightly calcareous.	
5600	5610	100	<u>Shale</u> , dark gray, calcareous, blocky.	
5610	5620	80	<u>Shale</u> , as above, very calcareous.	
		20	<u>Limestone</u> , dark gray brown, inoceramas prism.	
5620	5630	70	<u>Shale</u> , as above, very calcareous.	
		30	<u>Limestone</u> , as above.	
5630	5640	100	<u>Shale</u> , dark gray, very calcareous.	
5640	5650	80	<u>Shale</u> , as above.	
		20	<u>Limestone</u> , gray brown, pyritic.	
5650	5660	100	<u>Shale</u> , dark gray, calcareous with thin partings very fine <u>Sandstone-Siltstone</u> .	
5660	5670	100	<u>Shale</u> , dark gray, splintery, pyritic.	
5670	5680	100	<u>Shale</u> , dark gray, silty.	
5680	5690	100	<u>Sandstone</u> , pale brown gray, very fine, angular, fair sorting with <u>uniform pale yellow fluorescence, moderate yellow cut fluorescence</u> (few green shale grains)	

## SHELL OIL COMPANY

AREA OR FIELD Carson

WEEK ENDING \_\_\_\_\_

CORE FROM 5690 TO 5740

## CORE RECORD

COMPANY San Juan County, New Mexico

CORES EXAMINED BY \_\_\_\_\_

LEASE AND WELL NO. 1

D.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL-GAS	CORE OR DITCH	See Description
1	5690	5740	50'						
	5690	5692.5	2.5'	Sandstone, light gray, very fine, angular-well sorted, very slightly calcareous, with grains, light green shale, irregular black shale partings.					
	5692.5	5693.5	1'	Sandstone, as above, no shale partings.					
	5693.5	5698	4.5'	Sandstone, as above with irregular shale partings.					
	5698	5706	8'	Sandstone, as above, no shale partings with rare copper mica flakes at 5704-5705, sandstone is very calcareous. This Sandstone interval appears to have low porosity. 5704-5706, very spotty light yellow fluorescence, very pale yellow cut fluorescence + acetone test.					
	5706	5707	1'	Sandstone, as above, argillaceous with thin regular black micaceous shale partings. Dip 1-5°.		1-5°			
	5707	5711.4	4.4'	Sandstone, as above, argillaceous with black shale partings.					
	5711.4	5731.3	19.9'	Shale, black, massive.					
	5731.3	5733	.7'	Shale, black, massive, very sandy.					
	5733	5735	2'	Sandstone, medium gray, very fine, angular, poorly sorted, very argillaceous, rare white and copper mica flakes and green shale					
	5735	5737.7	2.7'	Sandstone, light gray, very fine, fair sorting, with irregular black shale partings, pyritic. At 5737.7 sharp contact. Dip 2-3°.		2-3°			
	5737.7	5740	2.3'	Sandstone, as above, very argillaceous.					

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).  
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

## DITCH SAMPLES

Examined by \_\_\_\_\_ 5750 to 5910  
\_\_\_\_\_ to \_\_\_\_\_Well Carson Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES LAGGED	NOT LAGGED
5740	5750	100	<u>Sandstone</u> , tan, very fine, angular, fair sorting, spotty light yellow fluorescence, medium blue yellow cut fluorescence, appears tight.		
5750	5760	100	<u>Sandstone</u> , as above, tan, argillaceous, slightly carbonaceous.		
5760	5770	100	<u>Shale</u> , black..		
5770	5780	100	<u>Sandstone</u> , pale gray, very fine, angular, well sorted, calcareous, hard, probably quartzite.		
5780	5790	100	<u>Shale</u> , black..		
5790	5800	100	<u>Sandstone</u> , pale gray, very fine, angular, well sorted.		
5800	5810	90	<u>Shale</u> , black..		
		10	<u>Sandstone</u> , light gray, very fine, angular, well sorted.		
5810	5820	80	<u>Shale</u> , as above.		
		20	<u>Sandstone</u> , as above, calcareous.		
5820	5830	100	<u>Shale</u> , black.		
5830	5840	70	<u>Shale</u> , as above.		
		30	<u>Sandstone</u> , light gray, very fine, angular, well sorted.		
5840	5850	100	<u>Shale</u> , black.		
5850	5860	70	<u>Sandstone</u> , medium brown, fine, angular-sub rounded, poorly sorted, calcareous, micro conglomeratic.		
		30	<u>Shale</u> , as above.		
5860	5870	100	<u>Shale</u> , black.		
5870	5890	70	<u>Shale</u> , black.		
		30	<u>Sandstone</u> , light gray, very fine, sub angular, calcareous.		
5890	5900	50	<u>Shale</u> , as above.		
		50	<u>Sandstone</u> , as above.		
5900	5910	100	<u>Sandstone</u> , white, fine, angular, well sorted, with rare light green shale grains, 5% spotty light yellow fluorescence, moderate blue yellow cut fluorescence.		

## DITCH SAMPLES

Examined by \_\_\_\_\_ 5910 5983  
\_\_\_\_\_ to \_\_\_\_\_Well \_\_\_\_\_ Carsor Unit #1  
Field or Area San Juan County, New Mexico

FROM	TO	%	SHOWS UNDERLINED	SAMPLES <del>LAGGED</del> NOT LAGGED
5910	5920	100	<u>Shale</u> , black, with trace <u>Sandstone</u> , as above.	
5920	5930	100	<u>Sandstone</u> , light green, very fine, angular, well sorted, slightly quartzitic with green and orange grains, slightly calcareous.	
5930	5940	100	<u>Sandstone</u> , as above.	
5940	5950	50	<u>Shale</u> , light green mottled red.	
		50	<u>Sandstone</u> , as above.	
5950	5960	100	<u>Sandstone</u> , light green, fine angular, with orange grains.	
5960	5970	30	<u>Shale</u> , light green.	
		70	<u>Sandstone</u> , as above.	
5970	5975	20	<u>Shale</u> , light green, show waxy.	
		80	<u>Sandstone</u> , white, fine-medium, sub rounded-angular, poorly sorted with abundant orange chert fragments.	
5975	5980	100	<u>Sandstone</u> , pale green, fine, angular with coarse white quartz grains and abundant coarse orange chert fragments, trace red and green <u>Shale</u> .	
5980	5983	50	<u>Shale</u> , pale green.	
		50	<u>Shale</u> , red-brown, silty.	