## NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico

## WELL RECORD

3.5	AREA 640 ATE WELL	CORRECTLY	<u></u>	not more Rules and it with (? UNTIL P	Regulations of CORM C-105 IS	ys after completion the Commission. In FRIPLICATE. FOR: PROPERLY FILL:	dicate question M C-110 WILI ED OUT.	nable data L NOT BE	by following APPROVED	*
						• Las Pal:			os Angeles 28	, C
1E.									County	,
7011 is	60 ,	et south of	the North	line and	660 fee	t west of the Ea	st line of	Sec.	. 22	·•
						nment No				••
• A A-							A ddracc			
f Govern	ment land (	he permittee	is Mis	sion P	etroleum	ne.	Address 16	18 N.	Las Palmas	Ave
				Same			Address	s Ang	eres 52, car	ır.
rilling (	commenced.	Septem	ber 18	19.	51 Drilli	ng was complet	ed appro	x. Ju	ıly 1, <sub>19</sub> 52	••
ame of (	drilling con	tractor	ervin	DP1111	ng Co.	,	Address	Aztec	. N. M.	••
					feet.	•				
he infor	mation give	n is to be ke	pt confide	ntial until.	. • •		1	19		
,	003	•	_		SANDS OR					
o. 1, fro	291 294		to2	1940 ga	No.	4, from		to		
o. 2, fro	mm	······································	to	. <b>971</b> 01	No.	5, from	••••••	to		
o. 3, frc	m	•••••	to		No.	6, from		to		
	•			IMPOR	TANT WATE	ER SANDS				
		,	ow and ele	evation to v	vhich water re	ose in hole.			OFFFILM	
o. 1, fro	318 328	6 1.		to	3188	fee	et		urnriat0/	•••
a 9 fra	1773			to	34.74	fee	et.		JAN 1 9 7 53	••
o. 3, fro	m			to		fe	et	\\OH	CON. COM.	
o. 4, fro	m	•••••		to		fe	et		DIST. 3	
					CASING REC					
		l	1	1	1	Orim 4	рири/	RATED		=
SIZE	WEIGHT PER FOOT	THREADS PER INCH	MAKE	AMOUNT	KIND OF SHOE	CUT & FILLED FROM	FROM	TO	PURPOSE	
/4#	48#	8	Nat.		Pex.Patt	1		-	Surface	_
	32# 22#	8	<b>11</b>	1115' 2918'	19	(pulled) (cemented)	1115'	<u> </u>		
	14#	8	19	3190	-	(pulled)	<u>'</u>			_
										-
				+	<del></del>					_
•	1	<u> </u>	!	1	y <sub>2</sub> (1.28 ± 2.18)		],	<u> </u>	1	-
IOLE	L13/4"	500° 2918°	NO. SAC OF CEM 250 50		ethods used	MUD GR	AVITY	АМО	UNT OF MUD USED	<del>-</del> -
										_
<del>-</del>				PLU	GS AND ADA	PTERS				
eaving	plug—Mate	rial			Leng	th	Der	oth Set	8	
lapters	— Material				* .	Size		•	ه <sub>د</sub> بي <del>که</del>	
		1	RECORD	ог ѕноо	TING OR CI	HEMICAL TREA	TMENT			
SIZE	SHELL	USED	EXPLOSIV	E OR	QUANTITY	DATE	DEPTH S	HOT	DEPTH CLEANED OUT	=
			CHEMICAL		WUARTITY		OR TREA	TED	DELTE CHERRED OUT	-
.40 a	tis. 4		yceri		INO qts	5-5-52	2940-2	971	2940-2971	
<del></del>	1	1 7	id		1000 gal	5-21-52 5-20-52	2940-2		<del>2940-2971</del>	_
ry i l to	norease approz produce em or other	of oil 100 h	POC. RECO	oo gals per day bbls. RD OF DR	per day ILL-STEM AI were made, st	d resulte er, this ND SPECIAL TI abmit report on	d in ad soon dr ESTS separate sho	ditic		of 11
									tofee	
	ls were use	d from	0	feet to	3292	feet, and from	· · · · · · · · · · · · · · · · · · ·	feet	tofee	t
					PRODUCTIO	N				
ble tool		bout Ju	•				almo			
ble tool	oducing				*			_	vas oil;%	
ble tool t to pro	ection of th	e first 24 ho		<i>01.</i> c	ediment. Gra					
t to produce p	uction of th	e first 24 ho % water;				ns gasoline per	1,000 cu. ft.	of gas	•••••••	
t to produce production;	l, cu. ft. per	e first 24 ho % water; 24 hours		•		and Barborrito Por				••
t to produce production;	l, cu. ft. per	e first 24 ho % water;		•		no Badomio Por				••
t to produce produce produce produce produce produce gas wellock pres	l, cu. ft. per	e first 24 ho% water; 24 hours er sq. in		•••••••••••••••••••••••••••••••••••••••	EMPLOYEE	$\mathbf{s}$				
t to produce produce produce produce produce produce preserve pres	l, cu. ft. per	e first 24 ho % water; · 24 hours er sq. in		·	EMPLOYEE  Driller	s			, Drille	r
t to produce produce produce produce produce produce produce preserve prese	l, cu. ft. per	e first 24 ho % water; · 24 hours er sq. in		·	EMPLOYEE  Driller	s			, Drille	r
t to produce produce produce produce produce produce produce preserve prese	l, cu. ft. per	e first 24 ho % water; · 24 hours er sq. in		······,	EMPLOYEE Driller	s	•-•			r
t to produce produce produce produce prosect presect p	l, cu. ft. persure, lbs. p	water; 24 hours er sq. in	FO	RMATION	EMPLOYEE Driller Driller RECORD ON	S N OTHER SIDE	E			r r
to product to product to product to product product preserves.	l, cu. ft. persure, lbs. p	e first 24 ho% water; 24 hourser sq. in	FO	RMATION	EMPLOYEE Driller Driller RECORD ON	S N OTHER SIDE	E		, Drille	r r
able tool  at to produce production;  gas well  book pres  Cewey  hereby s  so far a	l, cu. ft. per sure, lbs. p  Sherwite Cantre  wear or affis can be de	water; 24 hours er sq. in  111  111  111  111  111  111	FO informati m availab	RMATION	EMPLOYEE  Driller  Driller ON  RECORD ON  erewith is a co	S  OTHER SIDE	E ect record of	f the wel	ll and all work done or	r r
at to produce produce produce present process well beck present process of a proces	l, cu. ft. per sure, lbs. p  Sherwit Cantre wear or affis can be de	water; 24 hours er sq. in  111  111  111  111  111  111  1	FO information available this	RMATION on given he alle records.	EMPLOYEE Driller Driller RECORD ON	S  N OTHER SIDE  Omplete and correct  Los Angel	E ect record of	f the wel	ll and all work done or	r r
t to product to product to product product preserve y care y	l, cu. ft. per sure, lbs. p  Sherwit Cantre wear or affis can be de	water; 24 hours er sq. in  111  111  111  111  111  111  1	FO information available this	RMATION on given he ale records.	EMPLOYEE Driller Driller RECORD OF	S  OTHER SIDE  In other side  Office and correct  Los Angel  ome	ect record of	the wel	ll and all work done or	r r 
t to product to product to product product pressure years.	l, cu. ft. per sure, lbs. p  Sherwit Cantre wear or affis can be de	water; 24 hours er sq. in  111  111  111  111  111  111  1	FO information available this	RMATION on given he ale records.	EMPLOYEE  Driller  Driller RECORD ON erewith is a co	S OTHER SIDE	ect record of	f the wel	ll and all work done or	r r n
t to product to produc	l, cu. ft. per sure, lbs. p  Sherwit Cantre wear or affis can be de	water; 24 hours er sq. in  111  irm that the termined from to before many than the termined from the termined f	FO information available this	RMATION on given he alle records.	EMPLOYEE  Driller  Driller  RECORD ON erewith is a co	OTHER SIDE	ect record of	ifor:	ll and all work done or	r r 

## FORMATION RECORD

FROM	то	THICKNESS	FORMATION
0	50	IN FEET	Soil.
30 60	60 70		Gray, sandy shale - Louis. Dark Gray calcareous shale.
<b>7</b> 0 8 <b>0</b>	80	e	Hard, dark gray shale, sandy.
90 100	100 110		Gray, sandy shale.
110	120	went to the	H H H
120 130	130 140	ing, wat part	Light gray sandy shale and 25% light gray
140	150		fine-grained sandstone. Light gray, fine-grained sandstone and
150	160	a Tobber	some shale, ss. about 80%. Light gray, very sandy shale 90%; light
160	170		gray sandstone 10%. Light gray, fine-grained sandstone and
170	180		light gray, very sandy shale, about 50-50. Missing.
180	190		Light gray, very soft, fine-grained sand-
190	200		stone, 90% light gray, sandy shale, 10%. Hard gray sandstone, very fine-grained,
200	210		95%, light gray sandy shale, 5%. Same as previous sample.
210 220	220	Harris II	Dark gray, sandy shale, 80%, dark gray
230	240		sandstone, fine-grained, 20%. Dark gray, soft, fine-grained sandstone,
21+0	250		25%, dark gray sandy shale, 75%. Dark gray, soft, fine-grained sandstone,
			50%, dark gray sandy shale, 50%. Same as previous sample.
250 2 <b>6</b> 0	260 270		Light gray, very sandy shale, 50%, light
270	280		gray, fine-grained soft sandstone, 50%. Light gray, very sandy shale.
280	290		Very soft, light gray sandstone, 25%, dark gray, sandy shale, 75%.
290	300	* 5	Dark and light gray sandy shale, 75%, light gray, soft sandstone, 25%.
300 310	310 320		Dark gray sandy shale. Light gray, very soft, fine-grained sand-
			stone, 20%, light gray sandy shale, 80%. Light gray, very sandy shale.
320 330	330 340		Light gray, sandy shale, 70%, light gray
340	350	•	soft sandstone, 30%. Gray fine-grained sandstone and gray
			sandy shale, about 50-50, some black, sandy shale.
350	360		Very light, grayish-white, sandy shale and light gray sandstone, 50-50.
360 370	370 380		Light gray, sandy shale. Grayish-black, sandy shale, 90%, gray
_			sandstone, 10%.
380	390		Light gray, coarse-grained sandstone, traces of coal.
<u> 385</u>			Top. Mesaverde.
390 400	400 410		Light gray sandstone and coal, 50-50.
410	420		Light gray sandstone, grayish clay and coal. Gray, medium-grained sandstone.
420	430		Very soft, medium-grained gray sandstone and black shale, 50-50.
1+30	440		Fine, fine-grained sandstone, 90%, brown shale, 10%.
440 450	450 460		Very soft, medium-grained, gray sandstone. Very soft, medium gray, brownish-gray
460	500		sandstone. Gray shale, cemented 11-3/4" at 500' with
<i>5</i> 20	530		200 sacks.
530	550		Light gray, fine-grained sandstone, 90%, gray shale, 10%.
550 550	560	,	Missing. Sandy, black, carbonaceous shale, 80%,
560	570		gray, sandy shale, 20% - water. Very fine-grained, gray sandstone and
570	580		gray shale, 50-50. Dark and light gray, very fine-grained
<b></b> -			sandstone (some gray shale, probably cavings).
580	590		Dark and light gray sandstone and coal.
590	600		50-50, more water. Light gray, medium-grained sandstone,
600	610		carbonaceous shale and coal, 33% of each. Black, carbonaceous, 30%, shale and coal,
610	620		Gray, very sandy shale, thin sand partings.
620 630	630 640		Coarse-grained gray sand (water?). Fine-grained, light gray sand, coal partings
640 650	650 <b>660</b>		Same as previous sample.
660 670	670 680		Black, carboniferous shale, 80%, dark gray
680	690		coarse sandstone, 20%,
·			Dark gray, medium-grained sandstone, some fine coal.
690	700		Same as previous sample, no coal (Picked up more water, 682 - 705, rose 400 in hole)
700 710	710 720		Same as previous sample, no coal. Same as previous sample, no coal.
720 730	730 740		Lighter gray, medium-grained sandstone. Very light gray, medium-grained sandstone,
740	750		25%, coal, 75%. Light gray sandy clay, streaks of coal.
750	760	• •	Sandy gray shale and clay, 60%, black
760 770	770		Same as previous sample.
<b>770</b> 78 <b>0</b>	780 790		Light gray, sandy shale, specks of bentonite Sandy, light gray shale and clay, 70%.
			black carbonaceous shale, 30%. Sandy, light gray shale and clay, with
790	800		
790	800		black carbonaceous shale partings (black
790 800	810		shale cavings). Fine-grained, light gray shale, 50%.
			black carbonaceous shale partings (black shale cavings).

FROM	TO	FORMATION
820	830	Light gray, sandy shale with black carbonaceous
830	840	shale, cavings. Light gray, medium-grained soft sandstone, little gray shale.
840	850	Gray, fine-grained sandstone, with charcoal particles and iron pyrites, some gray shale.
8 <b>50</b> 8 <b>60</b>	8 <b>6</b> 0 870	Sandy, gray shale and gray sandstone, 50-50. Fine-grained, slightly calcareous, gray sandstone
870	8 <b>80</b>	and gray shale, 50-50. Hard, gray, fine-grained sandstone and gray shale, 50-50.
380 390 <b>900</b> 910	890 900 910 920	Dark gray, calcareous shale (sandstone cavings). Missing. Dark gray, calcareous shale (sand stringers). Black, carbonaceous shale and gray, medium- grained sandstone, 50-50.
920 930	930 940	Sticky, brownish-black shale. Gray and brown shale, calcareous, sandstone stringers.
940	950	Gray and brown shale (brown shale carries char- coal particles) and sandstone stringers.
950 960 970 980	9 <b>60</b> 9 <b>7</b> 0 98 <b>0</b> 990	Same as previous sample. Slightly sandy brown shale.
990	1666	Sandy, gray shale and medium-grained gray sandstone, 50-50.
1000	1010	Brown shale and dark gray, medium-grained sand- stone, 50-50.
1010	1020	Gray and brown shale and fine-grained, gray sandstone, 50-50.
1020	1030	Gray shale and gray, fine-grained sandstone, 50-50.
1030	1040	Gray and brown shale, 75%, and fine-grained gray sandstone, 25%.
1040 1050 1060	1050 1060 1070	Sandy, gray shale (brown shale cavings). Gray shale, sandy. " " (brown shale cavings).
1070	1080	Sandy gray and black shale and gray sandstone, 50-50.
1080 1090 1100	1090 1100 1110	Sandy, gray shale. Sandy, gray shale, sandstone stringers. Sandy, gray shale, gray sandstone, 50-50, some coal.
1110 1115	1115 1119	Sandy, " " " , 50-50, no coal. " " " " , landed 8-5/8" at 1112', water shut off.
1119 1130 1140	1130 1140 1 <b>15</b> 0	Bluish-gray, sandy shale, some sandstone stringers Sandy, gray and brown shale, 90%, gray sandstone,
1150 1160 1170 1180 1190	1160 1170 1180 1190 1200	Sandy, gray and black shale. Gray and black, slightly calcareous shale. Calcareous gray shale, gray sandstone stringers. Soft, argillaceous sandstone and dark gray, sandy shale, 50-50.

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FORMATION
              TO
FROM
                            Black shale.
1200
              1210
                            Soft, dark gray, fine-grained sandstone, 100%.
              1220
1210
              1230
                            Missing.
1220
                            Black carbonaceous sandstone. Top. Mancos - 1240'
              1240
1230
                            Slightly sandy, dark gray shale.
              1250
1240
              1260
1250
                            Slightly calcareous, dark gray shale.
              1270
1260
              1280
1270
                            Sandy, dark gray shale.
1280
              1290
                            Black shale, calcareous.
              1300
1290
              1310
1300
                            Slightly sendy, gray shale.
Sandy gray shale, sand stringers.
Black shale, slightly calcareous stringers,
              1320
1310
              1330
1320
              1340
1330
                            fine-grained, very hard, calcareous sandstone. Fine-grained, gray, soft sandstone, some gray shale
              1350
1340
                            Same as previous sample.
              1360
1350
                            Same as previous sample, no shale.
              1370
1360
                            Hard, blue, sandy shale.
1370
1380
              1380
              1390
              1400
                            Hard, blue shale.
1390
                            Blue shale, somewhat calcareous.
1400
              1410
              1420
1410
                            Blue shale, somewhat calcareous.
              1430
1420
                                           **
              1440
 1430
                            Blue shale, very slightly calcareous.
              1450
 1440
              1460
 1450
                             Calcareous blue shale.
               1470
 1460
                             Blue and black shale, calcareous.
               1480
 1470
                             None-calcerous blue shale.
               1490
 1480
                                              blue-gray shale.
               1500
 1490
 1500
               1510
                             Calcareous, blue-gray shale.
 1510
               1520
                             Non-calcareous, blue shale.
               1530
 1520
                             Slightly calcareous, blue shale.
               1540
 1530
1540
                                                       r r
                                            17
               1550
 1550
1560
               1560
               1570
1580
                             Blue shale.
                             Calcareous blue shale, lime stringers.
 1570
                             Blue shale.
               1590
 1580
                             Calcareous, blue shale.
 1590
1600
               1600
               1610
                                             11
               1620
 1610
                             Missing.
               1630
 1620
                             Calcareous blue shale.
               1640
 1630
                                            11
               1650
 161+0
               1660
 1650
1660
                             Non-calcareous blue shale.
               1670
                             Calcareous blue shale, 50%, blue-white
 1670
               1680
                             limestone, 50%. Calcareous blue shale.
               1690
 1680
               1700
 1690
               1710
 1700
                             Slightly calcareous blue shale.
               1720
  1710
               1730
```

FROM	TO	FORMATION
1720	1740	Calcareous blue shale.
1730	1750	ANTONIO DINATO!
1740		14 14
1750	1760	tt H
1760	1770	
1770	1780	
1780	1790	5 <b>4</b> 19 19
1790	1800	Slightly calcareous, blue shale.
1800	1810	the state of the s
1810	1820	<b>11</b>
1820	1330	Calcareous blue shale.
1.830	1840	Slightly calcareous blue shale.
1840	ī850	Limestone, 50%, calcareous shale, 50%.
	1860	
1850	T000	Argillaceous limestone, 50%, and calcareous shale,
-01-	<b>*</b> O o	50%.
1860	1870	Calcareous blue shale.
<b>1</b> 870	1880	If It it
1880	1890	Argillaceous limestone.
1890	1900	" and shale.
1900	1910	H H H
1910	1920	n n n
1920	1930	Calcareous blue shale.
1930	1940	it it it
	1950	Calcareous blue shale and sandy blue shale part-
1940	1950	
3050	20/0	ings.
1950	1960	Calcareous blue shale.
1960	1970	Fissile blue shale with calcareous shale partings.
1970	1980	
1980	1990	Very calcareous bluish-gray shale.
1990	2000	il it it it it
2000	2010	Very calcareous, bluish-gray shale, some non-
		calcerous blue shale.
2010	20 <b>20</b>	Same as previous sample.
2020	2030	Hard, slightly sandy blue shale.
2030	20 <b>40</b>	Calcareous gray shale, 50%, calcareous, medium-
2030	2.070	grained sandstone, 50%.
2040	20 <b>50</b>	Fine-grained, calcareous sandstone with cal-
20 <del>40</del>	20 )0	careous gray shale stringers.
0050	20/0	
2050	206 <b>0</b>	Gray and black limestone with blue and gray,
		calcareous shale partings.
2060	2070	Same as previous sample.
2070	2080	Fissile blue shale, 90%, gray limestone, 10%.
208 <b>0</b>	20 <b>90</b>	Blue shale, gray limestone and gray, calcerous
		sandstone in about equal amounts.
2090	2100	Fine-grained, calcerous sandstone.
2100	2110	the state of the s
2110	2120	Light gray and black, fine-grained, slightly
d. d. O	** *** *** ***	calcerous sandstone, carrying some iron pyrites
		and gray shale partings.
2220	21.20	Same as previous sample.
2120	2130	
2130	2140	Blue, calcareous shale.
2140	2150	Bluish-gray, calcareous shale.
2150	2160	Blue, calcareous shale.
2160	2170	76 19 II
2170	2180	Fissile blue shale, slightly calcareous.
2180	2190	n ii ii n
2190	2200	Hard, calcareous blue shale.
2200	2210	n' n n
	The specimen shall	

FROM	TO	FORMATION
2210	2220	Slightly calcareous blue shale.
2220	2230	
2230	2240	n .
2240	2250	Calcareous blue shale.
2250	2260	
2260	2270	17 17 17 17 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19
2270	2280	are many sine abole and energy fine-grained
2280	2 <b>290</b>	Calcareous blue shale and gray, fine-grained sandstone, water, 1 bailer per hour.
229 <b>0</b>	2300	Gray, fine-grained sandstone.
2300	2 <b>310</b>	Sandy blue shale with calcareous sandstone
		partings. Fine-grained, calcareous sandstone with
2310	2 <b>320</b>	calcareous gray shale partings. (Show gas).
	2222	Calcareous, gray sandstone, 75%, calcareous gray
2 <b>3</b> 20	2330	shale, 25%.
2220	2340	Very fine-grained, calcareous, gray sandstone,
<b>23</b> 30	2.JTO	nama amay chala nartings.
2340	2350	Very fine-grained. caicareous, gray sandstone
2540	J.J.	and delements statt sigle. DUMDU.
2 <b>3</b> 50-	2 <b>360</b>	Calcareous, gray shale, 70%, carcareous, iii.
	-	anainad aphastone. And.
<b>236</b> 0	2378	Gray sandstone and non-calcareous gray shale,
	0200	50-50. Gray sandstone and slightly calcareous gray
2378	2 <b>390</b>	-hala 50-50
0200	5,400	Blue-black shale, sandy, 90%, gray sandstone,
2390	2400	10%
2400	2410	Fine-grained, gray sandstone, some gray snale.
2410	2420	a a a a a a a a a a a a a a a a a a a
2420	2430	и и " , 90%, gray, cal-
	-	cerous shale, 10%.
2430	5 <del>/1/+</del> 0	Wine angined arow samestone.
2440	2450	Fine-grained, gray sandstone with shale partings.
2450	2460	Fine-grained, gray sandstone, 70%, gray share,
		50%.
, 2460	2470	Bluish-gray, sandy shale.
2470	2480	Very calcerous gray shale.
2480	2490	Hard, blue-gray shale.
2490	2500	·
2500	2510	Very sandy, blue shale. Sandy blue shale.
2510	2 <b>520</b>	Hard, black, argillaceous limestone.
2520	2 <b>530</b> 2 <b>54</b> 0	il it it it
2530		Gray, calcareous shale, 90%, argiliaceous
2540	2550	limestone, 10%.
2550	2 <b>56</b> 0	Gravish-black. calcareous shale.
2560	2570	Grav. calcareous shale, streaks pentonite.
2570	258 <b>0</b>	Colorronus black shale.
2580	2590	Fine-grained, gray, calcareous sandstone, our,
•		gray, calcareous shale. 20%.
2 <b>5</b> 90	2600	Gray, calcareous shale, streaks bentonite.
2600	2610	Black, non-calcareous shale.
2610	2620	ii best court as a

		7•
		FORMATION
FROM	TO	
2620 2630	2 <b>63</b> 0 2640	Black, non-calcareous shale, bentonite. Calcerous gray shale and siltstone, 50-50.
2640 2650	2650 2660	Non-calcareous black shale.
<b>26</b> 60 <b>267</b> 0	<b>2670</b> 2 <b>6</b> 80	" " , with calcerous gray shale
2070		partings.
2680 <b>2</b> 690	2 <b>6</b> 90 2700	Non-calcerous black shale. Non-calcerous black shale.
2700	2710	F2 FE F7 T7 SE 92 93 18
2710	27 <b>20</b>	it if if
2720	2730 2740	n n n n
2730 2740	2750	with chalky spots.
2750	2760	H G H
2760	2770	the state of the s
2770	2780	nt n n
2780	2790 2800	n n n
2790 2800	2810	11 11 11 11
2825 2832 2842 2852 2862 2877 2882 2892 2904 2924 2931 2940-	2832 2842 2852 2862 2870 2877 2882 2892 2904 2924 2931 2940 2951	Black, non-calcareous shale. Very fine-grained, dark gray sandstone. Very fine-grained, dark gray sandstone 25%, black shale 75%. Somewhat sandy black shale, some bentonite.  Black shale, non-calcareous Calcareous black shale. Missing. Calcareous grayish-black shale. Black limestone, some calcite. Black limestone.
2951	2956	Black limestone, some bentonite, oil and gas
2956 2958	2958 2959	at 2953. Grayish-black limestone (black shale cavings). Black limestone, some calcite crystals and some bentonite.
		Limestone section from 2931 to 2959 shows no porosity. Presence of calcite indicates fracturing where oil probably has accumulated.
2959	2961	Dark gray, almost black, semi-crystalline limestone quite argillaceous, 50 feet of oil in hole from 2953'.
2961 2964	2964 2967	Same as previous sample, with black shale
2967	2971	cavings. Dark gray, calcareous shale, some bentonite.
		Between 2953 and bottom, oil increased and rose to from 700 to 1000 feet in hole.