#### WELL REPORT

### ANDERSON OIL COMPANY: EL SUR #1

## SAN JUAN COUNTY, NEW MEXICO

### LOCATION

660' 'mom the north line and 1980' from the west line of Section 32, 21 North, Range 8 West, NMPM.

## ELLATION

6460' Ground: 6472' Kelley Bushing

### CONTRACTOR

Young Drilling Company, Inc., Rig #1, Ideco Rambler, Rotary Tools.

# SPUD AND COMPLETION DATA

Well commenced: November 17, 1971

Well completed: November 27, 1971, Plugged and abando ed

Total Depth 4586' Logger: 4590' Driller

Plugging Program:

Surface - 10 sacks 200' -300' - 35 sacks 2200' - 2300' - 35 sacks

4175' - 4275' - 35 sacks

### CASING

8 5/8" 73' with 40 sacks

## ELECTRICAL SURVEYS

Dresser Atlas - Induction Electrolog: 72' to 457 CON. COM. Dresser Atlas - Densilog: 72' to 457 CON. COM.

Dresser Atlas - Densilog: 72' to 4577'

Dresser Atlas - Acoustilog: 1494' to 2410': 3294' to

4194' to 4576'

### FORMATION TOPS

<u>Depth</u>	KB Datum
Spud	+6472
394'	+6078
557 <b>'</b>	+5915
2244'	+4228
2 <b>375'</b>	+4097
3310'	+3162
3370'	+ 5102
3527 <b>'</b>	+2945
3822'	+2650
	Spud 394' 557' 2244' 2375' 3310' 3370' 3527'

# FORMATION TOPS - CONTINUED

Cretaceous	Depth	KB Datum
Greenhorn (Kgh) Graneros (Kgr) Dakota "A" (Kda) Dakota "B" (Kdb) Dakota "D" (Kdd) Dakota Burro Canyon (Kdbc)	4154' 4202' 4224' 4342' 4431' 4493'	+2318 +2270 +2248 +2130 +2041 +1979
Jurassic		
Morrison (Jm) Total Depth (Logger) Total Depth (Driller)	4582' 4586' 4590'	, +1890 +1886

# WELL CUTTINGS

- 30' samples from 80' to 1500'

- 10' samples from 1500' to 2500' 30' samples from 2500' to 3200' 10' samples from 3200' to 4590' Driller TD

Samples described below from 1650' to 4590' (Driller TD).

# SAMPLE DESCRIPTION

1650-70	50% ss, wht, f-g, arkosic, SA-SR, carb inclus, por $\xi$ friable, N-S: 50% sh, gy, gy brn, gy grn, carb in part
i b [ 0 - 80	70% sh, as above: 30% ss, as above, bcm $v-f-f-g$ , $\underline{N-S}$
1680-90	As above: Tr tan, calc, tite ss, $\underline{N-S}$
1690-1700	90% sh, as above: 10% ss, as above
1700-30	50% ss, wht, f-g, as above, $\underline{N-S}$ : 50% sh, as above
1730-40	70% sh, as above: 30% ss, as above, bcm v-f-f-g in part, $\frac{N-S}{}$
1740-50	70% ss, as above, bcm f-m-g in part, $\underline{N-S}$ : 30% sh, as above
1750-60	50% ss, as above, $\underline{N-S}$ : 50% sh, as above
1760-70	80% ss, as above: 20% sh, as above
1770-80	70% sh, as above: 30% ss, v-f-f-g, bcm hd, tite, as above, $\underline{\text{N-S}}$ : Tr coal
1780 - 1830	90% sh, as above: 10% ss, as above
1830-60	100% sh, as above, bcm sdy & silty in part: Tr ss, as above
1860-1900	90% sh, as above: 10% ss, uncons, f-g, SA-SR, arkosic, $\underline{\text{N-S}}$

- 1900-20 90% sh, as above: 10% ss, gy, v-f-f-g, hd, tite
- 1920-30 90% ss, uncons, f-m-g, arkosic, SA-SR: Tr ss, cons, as above, bright gold fluor, fair cut: 10% sh, as above
- 1930-40 50% ss, as above: Tr cons ss, as above: 50% sh, as above
- 1940-50 30% ss, as above: 70% sh, as above
- 1950-70 80% sh, as above: 20% ss, as above, bcm hd, tite
- 30% ss, lt gy, cons-uncons, domin uncons, f-m-g, arkosic, SA-SR, por & friable, Tr bright gold fluor; fair cut: 70% sh, as above
- 1980-90 90% ss, as above: 10% sh, as above
- 1990-2000 90% sh, as above: 10% ss, as above, N-S
- 2000-10 90% ss, 1t gy, v-f-f-g, SA-SR, arkosic, intst1 clay,  $\underline{\text{N-S}}$ : 10% sh, as above
- 2010 30 70% ss, as above: 30% sh, as above: Tr diss pyrite
- 1890-1950 SP DST #1

-1

- 2020-50 100% sh, gy gy grn, gy grn, carb in part, silty & sdy in part: Tr ss, as above
- 2050-60 100% sh, as above: Tr ss, as above: Tr coal
- 2060-70 30% ss, as above, shy in part, calc & tite in part:  $\frac{N-S}{70\%}$  sh, as above: Tr coal
- 2070-2110 90% sh, as above: 10% ss, as above: Tr coal
- 2110-40 80% sh, as above: 20% ss, as above: Tr coal
- 2140-50 100% sh, as above: Tr ss, as above
- 2150-60 80% sh, as above: 20% ss, as above, N-S
- 2160-70 40% ss, wht, v-f-f-g, arkosic, SA-SR, abt intstl clay, Tr por, N-S: 60% sh, as above
- 2170-2220 30% ss, gy, v-f-g, arkosic, carb inclus, calc, shy, silty, tite, N-S: 70% sh, as above: Tr coal: Tr wht ss, as above
- 2220-30 90% sh, as above: 10% ss, as above

### TOP POINT LOOKOUT 2244' LOGS

- 2230-50 50% sh, as above: 50% coal: Tr ss, as above
- 2250-60 100% sh, as above: Tr ss, as above, N-S

- 2260-70 20% ss, wht, f-m-g, SA-SR, arkosic, por & friable, Tr intstl clay, N-S: 80% sh, as above
- 2270-80 20% ss, as above, cons-uncons,  $\underline{\text{N-S}}$ : 80% sh, as above: Tr coal
- 2280-2310 80% ssh, as above: N-S: 20% sh, as above: Tr coal
- 2310-40 70% ss, as above, f-g, bcm less porous,  $\underline{\text{N-S}}$ : 30% sh, as above
- 2340-60 50% ss, as above: 50% sh, as above: Tr coal
- 2360-70 % sh, as above: 30% ss, gy, v-f-f-g, as above, bcm shy, silty, tite, N-S

## TOP UPPER MANCOS 2375' LOGS

- 2370-80 70% ss, as above: 30% sh, as above: Tr coal
- 2380-90 70% sh, as above: 30% ss, as above: Tr coal
- 2390-2450 50% ss, as above: 50% sh, as above
- 2450-90 80% sh, gy gy brn, carb in part, sdy & silty in part: 20% ss, gy, v-f-g, as above, shy, silty, tite, N-S
- 2490-2560 90% sh, as above: 10% ss, as above
- 2560-2650 50% ss, as above: 50% sh, as above
- 2650-80 80% sh, as above: 20% ss, as above
- 2680-2980 90% sh, as above: Tr ss, as above: 10% sltstn, gy, gy brn, shy & sdy in part
- 2980-3040 20% ss, gy, v-f-g, arkosic, carb inclus, shy, silty, calc, tite,  $\underline{\text{N-S}}$ : 10% sltstn, as above: 70% sh, as above
- 3040-70 100% sh, as above: abt bentonite
- 3070-3100 40% ss, as above: 60% sh, as above
- 3100-30 20% ss, as above: 80% sh, as above

## TOP GALLUP 3310' LOGS

- 3130-3350 100% sh, as above: Tr ss, as above
- 50% ss, uncons, f-m-g, SA-SR, arkosic, N-S: 50% sh, as above
- 3360-70 20% ss, as above: 80% sh, as above

## TOP GALLUP SAND 3370' LOGS

3570-90 100% sh, as above: Tr ss, as above

3390-3420 100% sh, as above

### TOP LOWER MANCOS 3527' LOGS

3420-3830 100% sh, as above, bcm more carb: Tr coal: Tr ss, as 2980-3040

### TOP SANASTEE 3822' LOGS

3830-60 20% 1s, tan, f-x1n: 80% sh, gy brn, calc

3860-80 100% sh, as above: Tr 1s, as above

3880-90 100% sh, as above, dk gy, gy gy brn, carb: Tr 1s, as above

3890-3920 100% sh, dk gy, gy gy brn, carb: Tr calc sh: Tr sltstn, dk gy, calc, shy, Tr ls, as above

3920-40 90% sh, as above, bcm calc in part: 10% sltstn, gy, hd, calc, sdy in part: Tr ls, as above

3940-70 100% sh, as above: Tr sltstn, as above: Tr ls, as above

3970-4000 100% sh, dk gy, gy, fissile, carb in part: Tr sltstn, as above: Tr bentonite

4000-30 100% sh, as above: Tr 1s, as above: Tr sltstn, as above

4030-50 100% sh, as above: Tr 1s, as above: Tr sltstn, as above, bcm sdy in part

4050-70 100% sh, as above

4070-80 100% sh, gy, dk gy, carb in part, silty & sdy in part

4080-90 90% sh, as above: 10% sltstn, gy, hd, calc in part, silic in part: Tr ls, as above

4090-4110 80% sh, as above: 20% sltstn, as above

4110-30 60% sh, as above: 40% s1tstn, as above

4130-50 80% sh, as above: 20% sltstn, as above

### TOP GREENHORN 4154' LOGS

4150-60 90% sh, as above: 10% sltstn, as above

4160-70 60% sltstn, gy, calc, sdy in part, 40% sh, as above

4170-4190 80% sh, as above: Tr sh, gy brn mott calc: 20% sltstn, as above: Tr ls, brn, f-xln

4190-4200 70% sh, as above: Tr dk gy, platy sh: 30% sltstn, as above: Tr ls, as above

# TOP GRANEROS 4202' LOGS

4200-10 90% sh, as above: 10% s1tstn, as above: Tr 1s, as above

4210-20 70% sh, as above, bcm calc: 20% sltstn, as above: 10% ls, brn, f-xln, shy

# TOP DAKOTA "A" 4224' LOGS

4220-30 80% sh, as above: 20% sltstn, as above: Tr ls, as above: Tr ss, dk gy, v-f-f-g, arkosic, calc, shy, tite, N-S

90% sh, as above: 10% sltstn, as above: Tr 1s, as above: Tr ss, uncons, v-f-f-g

4240-50 30% ss, tan-gy, v-f-m-g, domin f-g, cons-uncons, SA-SR, arkosic, glauc in part, por in part: 20% 1t stn, gold fluor, fair cut: 70% sh, as above

4257 Circ Smp1

15" - 30% ss, as above: 70% sh, as above

30" - 30% ss, as above: 70% sh, as above

45" - 30% ss, as above: 70% sh, as above

4260-80 100% sh, dk gy, gy brn, sdy & silty

4280-90 80% ss, 1t gy, v-f-f-g, SA-SR, arkosic, calc, tite, shy in part,  $\underline{\text{N-S}}$ : 20% sh, as above

4290-4300 50% ss, as above, domin shy: 50% sh, as above

# TOP DAKOTA "B" 4342' LOGS

4310-50 80% sh, as above: 20% ss, as above, N-S

4363 Circ Smp1

30" - 100% ss, wht-1t gy, v-f-f-g, SA-SR, arkosic, por  $\xi$  friable in part: calc  $\xi$  tite in part: Tr intst1 clay, N-S: Tr sh, as above

4374 Circ Smp1s

30" - 100% ss, as above, domin calc & tite, N-S: Tr sh, as above

4350-74 DST #3

4380-90 40% ss, as above: 60% sh, as above

- 4390-4410 20% ss, gy, v-f-g, as above, calc, tite, silty, N-S: 80% sh, as above
- 4410-20 90% sh, dk gy, sdy  $\xi$  silty in part: 10% ss, as above, N-S

## TOP DAKOTA "D" 4431' LOGS

- 4420-50 100% sh, as above: Tr ss, as above
- 4447 Circ Smp1s

15" - 50% ss, buff, v-f-f-g, SA-SR, s1/arkosic, por, N-S: 50% sh, as above

30" - 90% ss, as above: 10% ss, buff, f-m-g, domin f-g, por, as above, N-S: Tr sh, as above

45" - 100% ss, buff, f-m-g, domin f-g, as above, N-S: Tr ss, buff, v-f-f-g, as above, N-S

60" - 100% ss, as above: Tr sh, as above

- 4450-70 100% sh, dk gy platy
- 4470-80 50% ss, buff, f-m-g, domin f-g, as above,  $\underline{\text{N-S}}$ : 50% sh, as above
- 44 80-90 80% ss, as above, bcm calc in part:  $\underline{N-S}$ : 20% sh, as above

### TOP DAKOTA BURRO CANYON 4493' LOGS

- 4490-4520 100% sh, as above: Tr ss, as above
- 4520-30 90% sh, as above: 10% ss, as above, N-S
- 4530-70 50% ss, buff, f-m-g, as above, N-S: 50% sh, as above

### TOP MORRISON 4582' LOGS

- 4570-90 50% ss, wht, uncons-cons, f-c-g, congl, abt intst1 clay, N-S: 50% sh, as above: Tr sh, pale grn, wxy
- 4590 TD Driller

### DRILLING TIME

Five foot drilling time from 1650' to 4590' (Driller TD) is listed below:

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 \circ \ \underline{05 - 10 - 15 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 55 - 60 - 65 - 70 - 75 - 80 - 85 - 90 - 95 - 100 \\
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1650 - 1700
                                  Geolograph Repair
1700 - 1800
1800-1900
1900 - 2000
2000-2100
                                 7- 7- 5- 5- 7- 5- 5- 4- 3- 3- 5-
2100-2200
              2 - 4 -
                    3 -
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2200 - 2300
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2300 - 2400
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2400-2500
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2500 - 2600
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2600 - 2700
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2700-2800
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2800 - 2900
                    7 -
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                                     8 - 8 -
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2900 - 3000
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3000-3100
             8-8-
                    8 -
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                                     8-10-12-10-11-11-11-10-
                                                               8 -
3100 - 3200
             7-10-
                          5- 5- 5- 5- 5- 5- 5- 5-
                       5 -
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3200 - 3300
                    5 -
                       5-6-8-6-5-5-5-6-7-7-
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3300 - 3400
                       8-11-10-10-10-11- 9- 9- 8-
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3400 - 3500
             6-8-7-8-7-5-6-7-7-8-7-
                                                     8 - 8 - 7 -
                                                               9 - 9 -
3500 - 3600
             9 - 9 - 10 - 13 - 13 - 13 - 14 - 17 - 18 - 16 - 18 - 17 - 18 - 18 - 10 - 10 - 11 - 10 - 11 - 12
3600 - 3700
            3700 - 3800
            10-11-11-10-10-9-10-9-9-9-8-7-9-8-7-6-7-9-9
3800 - 3900
3900 - 4000
             9 - 8 - 10 - 9 - 9 - 8 - 8 - 17 - 20 - 10 - 10 - 9 - 10 - 9 - 11 - 14 - 19 - 16 - 13 - 10
             4000 - 4100
4100 - 4200
            14-14-14-13-12-12-15-14-14- 9- 9- 7-10-13-16-19-18-19-21-22
4200 - 4300
            20-22-20-22-26-29-17-13-19- 9-12-23-23-15- 8-10- 9-10-14- 9
4300 - 4400
            11-10-17-15-17-19-21-18-22-24-15- 6- 8-10-13-15-17-26-28-24
4400-4500
            25-27-36-30-35-32-33- 9- 8- 9- 9-12-11-13- 9- 9-11-36-34-37
4500 - 4600
             5- 5- 8- 9- 5- 6-13-10- 8- 5- 6- 7- 5- 4- 6- 3- 4-37
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### CHRONOLOGICAL LOG

Dev. 1/2° @ 500' 1° @ 1000' 1-1/4° @ 1573'

Drlg (11 3/4 hrs) Trip (4 1/2 hrs)

11-20-71 ø 2226 w/bit #2

Mud Properties: Vis 52, Wt 9.2, WL 7.6

Drlg (7 3/4 hrs) Trips (3 3/4 hrs) Rig service (1/4 hr)

### CHRONOLOGICAL LOG - CONTINUED

11-20-71 Continued Condition mud (4 hrs) Logging (3/4 hr) Drillstem Test (6 3/4 hrs) Misc (3/4 hr)

11-21-71 Ø 3099' w/bit #4
Bit #2 - OSCIG - 931' - 13 3/4 hrs
Bit #3 - S4TG - 572' - 13 hrs

Dev. 3/4° @ 2024' 1/2° @ 2504' 1/4° @ 3076'

Drlg (18 1/2 hrs) Trips (5 1/4 hrs) Rig service (1/4 hr)

11-22-71 ø 3730' w/bit #5 Bit #4 - S4TG - 492' - 14 1/4 hrs

Dev. 1 ° @ 3568'

Mud Properties: Vis 35, Wt 9.1, WL 9.8

Drlg (20 1/4 hrs) Trips (3 1/4 hrs) Rig service (1/4 hr) Misc (1/4 hr)

11-23-71 TD 4188' Trip for Bit #7
Bit #5 - OSCIG - 486' - 18 hrs
Bit #6 - S-88(RR) - 134' - 6 1/4 hrs

Mud Properties: Vis 37, Wt 9.3, WL 8.4

Drlg (17 1/2 hrs) Trips (6 1/4 hrs) Rig service (1/4 hr)

11-24-71 ø 4324' w/bit #8 Bit #7 - MMH - 69' - 4 1/2 hrs

Dev. 3/4° @ 4054'

Mud Properties: Vis 66, Wt 9.3, WL 4

Drlg (7 3/4 hrs) Trips (7 1/2 hrs) Rig service (1/4 hr) Cond mud & circulate (1 1/2 hrs) Testing (2 3/4 hrs) Handle test tools (3 hrs) Circ Samples (1 1/4 hrs)

11-25-71 TD 4447 Cond hole for DST #4
Bit #8 - M4NG - 190' - 12 hrs

Mud Properties: Vis 62, Wt 9.5, WL 5

Drlg (8 3/4 hrs) Trips (7 hrs) Rig service (1/2 hr) Cond mud & circulate (2 3/4 hrs) Testing (3 1/2 hrs) Circ samples (1/2 hr) Handle test tools (1 hr)

# CHRONOLOGICAL LOG - CONTINUED

11-26-71 TD 4590' Logging Bit #9 - OW4 - 143' - 6 hrs

Mud Properties: Vis 64, Wt 9.6, WL 4.2

Drlg (6 hrs) Trips (9 1/4 hrs) Cond mud & circulate (3 hrs) Logging ( 1 1/2 hrs) Testing (2 3/4 hrs) Handle test tools (1 1/2 hrs)

11-27-71 TD 4590' Lay down test tools

Trips (7 3/4 hrs) Cond mud & circulate (1 1/2 hrs) Logging (10 1/2 hrs) Testing (4 1/4 hrs)

11-28-71 TD 4590' P & A

## BIT RECORD

No.	<u>Make</u>	Size	Туре	From	To	Footage	Hours Run
1	Security Hughes Security Security Hughes Security Reed Reed Hughes	7 7/8	S-3	73'	1573'	1500'	10 1/2
2		7 7/8	OSCIG	1573'	2504'	931'	13 3/4
3		7 7/8	S4TG	2504'	3076'	572'	13
4		7 7/8	S4TG	3076'	3568'	492'	14 1/4
5		7 7/8	OSCIG	3568'	4054'	486'	18
6		7 7/8	S-88(RR)	4054'	4188'	134'	6 1/4
7		7 7/8	MMH(RR)	4188'	4257'	69'	4 1/2
8		7 7/8	M4NG	4257'	4447'	190'	12
9		7 7/8	OW4(RR)	4447'	4590'	143'	6

TOTAL ROTATING HOURS - 98 1/4

# DEVIATION RECORD

No.	Depth	•	Degree	Date
1 2 3 4 5 6 7 8	500' 1000' 1573' 2024' 2504' 3076' 3568' 4054'	••	1/2° 1 ° 1-1/4° 3/4° 1/2° 1/4° 1 ° 3/4°	11-18-71 11-19-71 11-19-71 11-20-71 11-21-71 11-21-71 11-22-71 11-23-71

## ELECTRICAL SURVEY CALCULATIONS

		Porosity			Water	
Formation	Depth	Acoustilog	Densilog	Rw	Saturation	<u>Q</u>
Dakota Burro Canyon	4536'	16%	22%	1.2	87%	.12
Dakota Burro Canyon	4510'	16%	18%	1.0	100%	0
Dakota Burro Canyon	4497'	25%	12%	1.0	98%	. 25
Dakota "D"	4476'	10%	10%	1.2	100%	
Dakota "D"	4468'	12%	17%	1.2	100%	
Dakota "D"	4458'	12%	17%	.35	100%	
Dakota "D"	4435'	12%	12%	.35	100%	
Dakota "B"	4354'	18%	18%	.22	83%	
Dakota "A"	4312'	10%	10%	.22	100%	
Dakota "A"	4263'	15%	18%	.22	100%	
Menefee	1923'	16%	16%	2.0	100%	
Menefee	1915'	27%	25%	2.0	91%	.07
Menefee	1898'	26%	22%	2.0	100%	.15

Rw's calculated

### DRILLSTEM TEST RECORD

SP DST #1: 1890'-1950' (Menefee)

Open 15 minutes: fair blow

Shut In 30 minutes:

Open 60 minutes: fair blow dec to weak blow

Shut In 60 minutes:

Recovered: 1080' muddy fresh water, No Show Rw 6.0 @ 80 $^{\circ}$ F, Chlorides 650 ppm

Initial hydrostatic pressure	901	psi
Final hydrostatic pressure	901	psi
Initial flow pressure (1)	53	psi
Final flow pressure (1)	212	psi
Initial flow pressure (2)	239	psi
Final flow pressure (2)	505	psi
Initial shut in pressure		
Final shut in pressure		

Bottom Hole Temperature - 78°F

## DRILLSTEM TEST RECORD - CONTINUED

DST #2: 4227'-4257' (Dakota "A") (4223-53 Adjusted to logs)

Open 15 minutes: very weak blow

Shut In 30 minutes:

Open 60 minutes: no blow

Shut In 60 minutes:

Recovered: 140' mud, No Show

Bottom Hole Sampler: 2200 cc mud, N-S

Rw 7.0 @ 70°F Chlorides 750 ppm 25 psi, 118°F

Initial hydrostatic pressure 2118 psi Final hydrostatic pressure 2118 psi Initial flow pressure (1) 46 psi Final flow pressure (1) 92 psi Initial flow pressure (2) 102 psi 130 psi Final flow pressure (2) Initial shut in pressure 827 psi Final shut in pressure 954 psi

Bottom Hole Temperature - 118°F

DST #3: 4350'-4370' ( Dakota "B") (4346-66 Adjusted to logs)

Open 15 minutes: weak blow

Shut In 30 minutes:

Open 60 minutes: weak blow thru out test

Shut In 60 minutes:

Recovered: 300' formation water

Bottom Hole Sampler: 2200 cc water

Rw .68 @ 60°F

Chlorides 10,125 ppm

18 psi, 120°É

Initial hydrostatic pressure	2202 psi
Final hydrostatic pressure	2176 psi
Initial flow pressure (1)	8 psi
Final flow pressure (1)	17 psi
Initial flow pressure (2)	34 psi
Final flow pressure (2)	112 psi
Initial shut in pressure	1868 psi
Final shut in pressure	1790 psi

Bottom Hole Temperature -  $120^{\circ}$  F

### DRILLSTEM TEST RECORD - CONTINUED

DST #4: 4432' - 4447' (Dakota "D") (4428-43 Adjusted to logs)

Open 15 minutes: weak to strong blow air

Shut In 30 minutes:

Open 60 minutes: weak to strong blow dec to weak blow

45 minutes

Recovered: 1450' slightly gas cut water

Bottom Hole Sampler: 2200 cc water, trace gas  $_{Rw}$  1.3 @ 75  $^{o}\mathrm{F}$  ,

Chlorides 4250 ppm

70 psi, 120°F

Initial hydrostatic pressure	2264 psi
Final hydrostatic pressure	2220 psi
Initialflow pressure (1)	8 psi
Final flow pressure (1)	258 psi
Initial flow pressure (2)	310 psi
Final flow pressure (2)	602 psi
Initial shut in pressure	1938 psi
Final shut in pressure	1938 psi

Bottom Hole Temperature - 120°F

SP DST #5: 4460'-84' (Dakota "D")

Open 15 minutes: weak blow inc to fair blow

Shut In 30 minutes:

Open 60 minutes: weak blow inc to fair blow

Shut In 60 minutes:

Recovered: 518' formation water

Bottom Hole Sampler: 2200 cc water,  $\frac{N-S}{Rw}$  1.28 @ 75 F

Chlorides 4250 ppm 20 psi, 123°F

Initial hydrostatic pressure	2246	psi
Final hydrostatic pressure	2193	psi
Initial flow pressure (1)	8	psi
Final flow pressure (1)	86	psi
Initial flow pressure (2)	94	psi
Final flow pressure (2)	215	psi
Initial shut in pressure	1921	psi
Final shut in pressure	1912	psi

Bottom Hole Temperature - 123°F

## STMATION

This well was spudded November 17, 1971, and plugged and abandoned November 27, 1971. The well was drilled to a total depth of 4586' Logger: 4590' Driller, in the Morrison formation of Jurassic age. A total of 98 1/4 rotating hours were required for the drilling of this test.

All formations from 1650' to 4590' (Driller TD) were evaluated by (1) careful examination of rotary cuttings from 1650' to TD by a geologist in the field; (2) the entire stratigraphic section was evaluated by qualitative and quantitative analysis of the electrical surveys. A show of oil was noted in the Menefee formation (1890-1950) and the Dakota "A" zone (4223-53). Each of these intervals were subsequently drillstem tested with negative results. The Dakota "B" and Dakota "D" zones were also tested with water recovery on each test.

The well ran structurally 74' higher than the Davis Oil Company: Snake Eyes #1, located in Section 20, Township 21 North, Range 8 West, San Juan County, New Mexico, on top of the Dakota "D" zone.

Rotary samples were saved from 80' to total depth and shipped to the Four Corners Sample Cut in Farmington, New Mexico. A sample of the fluid from each interval tested was sent to Core Lab for complete analysis. An Induction Electrolog and Densilog were run from surface to total depth. An Acoustilog was run over selected intervals.

Dave M. Thomas, Jr.

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