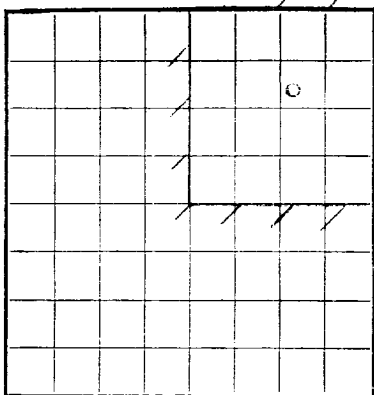


U. S. LAND OFFICE **SANTA FE**
SERIAL NUMBER **077383**
LEASE OR PERMIT TO PROSPECT

LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company **MCRAE OIL & GAS CORPORATION** Address **P. O. Box 2286, CASPER, WYO.**
Lessor or Tract **KUTZ FEDERAL** Field **WILDCAT** State **NEW MEXICO**
Well No. **1** Sec. **28** T. **28N** R. **10W** Meridian **10N** County **SAN JUAN**
Location **1190** ft. **N** of **N** Line and **1190** ft. **W** of **E** Line of **SECTION 28** Elevation **6073**
(Derrick floor relative to sea level)
The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.
Signed **E. B. MAYS** Title **PRODUCTION MANAGER**
Date **MAY 9, 1957**

The summary on this page is for the condition of the well at above date.

Commenced drilling **FEBRUARY 14**, 19**57** Finished drilling **APRIL 11**, 19**57**

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **2073** to **2132** **G** No. 4, from **6446** to **6676** **G**
No. 2, from **3628** to **3746** **G ?** No. 5, from _____ to _____
No. 3, from **4396** to **4504** **G ?** No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____ No. 3, from _____
No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
13 3/8	48	8	SPANG	126'					CONDUCTOR
8 5/8	24	8	SPANG	2200'					SURFACE
5 1/2	15.5	8	SPANG	6708'		PERF. SHOWN BELOW			PROD. STRING

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13 3/8	139' KB	100	CIRCULATED TO SURFACE		
8 5/8	2220' KB	200	PUMPED DOWN		
5 1/2	6721' KB	225	PUMPED DOWN		

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
Adapters—Material _____ Size _____

SAND FRAC XRAY RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
THE TOTAL OF 184' OF PERFORATIONS WAS SAND FRAC. WITH 60,000 GALS OF OIL AND 60,000 GALS OF SAND; 25,000 GALS OF 40-60 & 35,000 GALS OF 20-40. 1,000 GALS OF MUD ACID WAS SPOTTED AHEAD, & 609 BALLS WERE USED TO SET EVEN BREAKDOWN. AVG. INJECTION RATE 33BPM.						

TOOLS USED

Rotary tools were used from **131** feet to **6730** feet, and from _____ feet to _____ feet
Cable tools were used from **0** feet to **131** feet, and from _____ feet to _____ feet

DATES

FEBRUARY 14, 19**57** Put to producing **MAY 8**, 19**57**

The production for the first 24 hours was **150** barrels of fluid of which **99.7** % was oil; **0** % emulsion; _____ % water; and **0.3** % sediment. Gravity, °Bé. _____

If gas well, cu. ft. per 24 hours **APPROXIMATELY 15,000-162** Gallons gasoline per 1,000 cu. ft. of gas **UNKNOWN AS YET.**

Rock pressure, lbs. per sq. in. **2546 PSI**

EMPLOYEES

W. R. BUSTER, Driller **K. R. PHILLIPS**, Driller
DAVID ADCOCK, Driller **T. L. ASHEROOK**, Driller

FORMATION RECORD

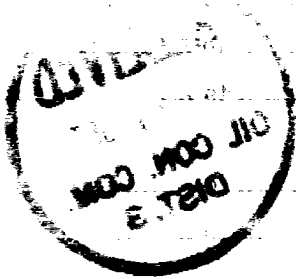
FROM—	TO—	TOTAL FEET	FORMATION
PERFORATIONS: 6444 - 6452, 6464-6474, 6528-6592, 6608-6616, 6622-6628, AND 6666-6672. PERFORATED 6 HOLES PER FOOT.			
FORMATION RECORD			
0	70'	70'	SURFACE ALLUVIUM
70'	1220	1150	ANIMAS FORMATION
1220	1770	550	KIRTLAND FORMATION
1770	2073	303	FRUITLAND FORMATION
2073	2134	61	PICTURED CLIFFS
2134	3628	1494	LEWIS SHALE
3628	3736	108	CLIFFHOUSE
3736	4396	660	NEWSEE
4396	4538	142	FT. LORAIN
4538	5730	1192	MANCOS SHALE
5730	5994	264	GALLUP ZONE
5994	6348	354	TOCITO ZONE
6348	6407	59	GREENHORN
6407	6444	37	GRANEROS
6444	6680	236	DAKOTA
6680	6730 TD		MORRISON

FROM—	TO—	TOTAL FEET	FORMATION
			WELL HISTORY
			4. CONES TO DSTS:
3-20-57	DST NO. 1: FROM 4405 TO 4520 OPEN 70 MIN.; 51 30 MIN. FAIR BLOW THROUGHOUT; REC. 120' GCM; HRP - 216.5 PSI; FHP - 2150 PSI; IFP - 45 PSI; FFP - 60 PSI; SIP & 145 PSI (INCOM.)		
3-29-57	CONE NO. 1: FROM 5508 TO 5591; REC. 6' BLK. SDY. SHALE, BLEEDING GAS. VERT. & HORIZ. FRACTURES; 4' W/GOOD SDY. SHALE.		
3-30-57	CONE NO. 2: FROM 5591 TO 6011; REC. 20' 16' AS ABOVE WITH NUMEROUS VERT. & HORIZ. FRACTURES; 4' W/GOOD SDY. SHALE.		
3-31-57	CONE NO. 3: FROM 6011 TO 6033; REC. 22' 6' BL. SDY. SM. BLEEDING GAS, GLAUC. SD. W/GOOD SDY. SHALE ON FRESH BREAK. 9' BLK. ROTTEN POKER CHIP SHALE.		
4-1-57	CONE NO. 4: FROM 6036 TO 6073; REC. 37' OF SOFT BLACK POKER CHIP SHALE. COMMONLY SD. BLEEDING GAS; 32 1/2' BLK. VERT. SLTLY SM. BLEEDING GAS FROM FRACTURES.		
4-6-57	CONE NO. 6: FROM 6073 TO 6601; REC. 50' 42' FG. V. HD. CNTD. 170N. GIZ. SD. VERT. & HORIZ. FRACT. & MANY REMOTE PLANES WITH THIN CARB. PILES, ST. SDY. ON FRESH BREAK. NO. FLUOR., 8' BLK. SM. W/THIN SD. STREAKS.		
4-6-57	DST NO. 2: FROM 6073-6601; OPEN 60 MIN.; 51 30 MIN. GAS TO SURFACE IN 30 MIN. TRACE OF DISTILLATE IN 30 MIN. REC. 70' GCM. HRP - 3261 PSI, FHP - 3093 PSI, IFP - 46 PSI, FFP - 33 PSI, SIP - 2194 PSI (INC. BUILDUP).		
4-7-57	CONE NO. 7: FROM 6601 - 6631. REC. 27' REC. 14' FHP. LIGHT CNTD. SD. W/GOOD SDY. ON FRESH BREAK; 4' BLK. CARB. SM. & COAL. 8' NO. SD.		
4-8-57	CONE NO. 8: FROM 6631 - 6649. REC. 17' REC. 3' V. SDY. BLK. SM.; 2' BLK. SM. & COAL; 4' VERT. SHY.; FG. SD. W/GOOD SDY. 2' BLK. SM. & COAL; 6' FG. GIZ. W/THIN SM. STREAKS.		
4-10-57	DST NO. 3: FROM 6580-6671; OPEN 60 MIN.; 51 45 MIN. GAS TO SURFACE IN 45 MIN.; 100 SMALL TO MEASURE. IHP - 3318 PSI; FHP - 3154 PSI; IFP - 115 PSI; FFP & 124 PSI; SIP & 124 PSI (INC. BUILDUP). REC. 30' GCM.		
4-10-57	DST NO. 4: FROM 6426 TO 6494. OPEN 60 MIN.; 51 30 MIN. GAS TO SURFACE IN 3 MIN; FLOWED 650 MCF BY PILOT TO BE HEARD. IHP - 3363 PSI; FHP - 3120 PSI; IFP - 231 PSI; FFP - 289 PSI; SIP - 2545 PSI.		
4-22-57	KEPT A STAR RECORDER DRILLING TIME LOG FROM 139' TO TD - 6730'. MAX DEVIATION FROM VERTICAL SURVEY AT REGULAR INTERVALS. MAXIMUM DEVIATION WAS 2" AT 1180' BUT WAS BACK 3/4" BY 2500'. WAS NEVER OVER 1 1/4" AT ANY TIME AFTER THIS.		
4-9-57	MAN SCHULMECHER 1-LS LOG AND MICRO LOG. COPIES OF LOG ATTACHED TO THIS REPORT.		
4-22-57	MAN SCHULMECHER GAMMA RAY - NEUTRON LOG. COPIES OF LOG ATTACHED.		

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

HISTORY OF OIL OR GAS WELL

16-43094-2 U. S. GOVERNMENT PRINTING OFFICE



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LOG OF OIL OR GAS WELL