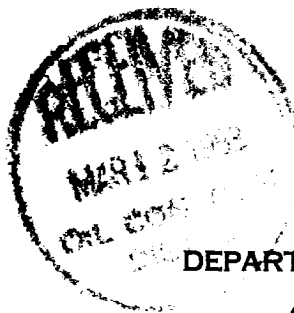


U. S. LAND OFFICE SE
SERIAL NUMBER 979439
LEASE OR PERMIT TO PROSPECT



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Musso Natural Gas Products Co. Address P.O. Box 1565, Farmington, New Mexico
 Lessor or Tract Horseshoe Canyon Field Mildred State New Mexico
 Well No. 47 Sec. 4 T. 30N R. 16W Meridian 102E County San Juan
 Location 501 ft. N. of N. Line and 360 ft. E. of E. Line of Sec. 4 Elevation 5426

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 _____

Date December 3, 1957 Title Petroleum Engineer

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

Commenced drilling 9-12, 1957 Finished drilling 9-18, 1957

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 118 to 124 No. 4, from _____ to _____
 No. 2, from 132 to 140 No. 5, from _____ to _____
 No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____ No. 3, from _____ to _____
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—	
8 5/8"	24.00	8 RT	1-55	1-6	flowed				
5 7/8"	19.00	8 RT	1-55	1-6	flowed				
2 1/2"	10.00	8 RT	1-55	1-6	flowed				
HISTOKA OR OIL OR CV2 MFTT									

MUDDING AND CEMENTING RECORD

Size casing		Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
MARK	8	5/8"	100	Circulated		
	5	1/2"	100	Single stage		

PLUGS AND ADAPTERS

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

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
		SEE WELL HISTORY				

TOOLS USED

Rotary tools were used from 0 feet to 285 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

10-5	19-57	Put to producing	10-28	19-57
The production for the first 24 hours was		barrels of fluid of which % was oil; %		
emulsion; % water; and % sediment.		Gravity, °Bé.		

If gas well, cu. ft. per 24 hours ----- Gallons gasoline per 1,000 cu. ft. of gas -----

Rock pressure, lbs. per sq. in.

EMPLOYEES

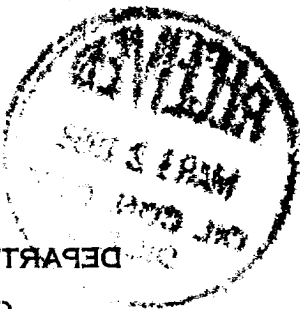
_____, Driller

_____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	1065	1065	Drk gry, calc, silty sh. Upper Mancos sh.
1065	1202	137	Lower Gallup form. Lt gry to brn calc carb micac glauco very fine gry ss w/irreg. interbed sh.
1202	1247	45	"Tocito" form. Lt gry, fine to coarse-grained, glauco sandstone w/some thin interbedded sh stringers.
1247	1270	23	Sanasatee form. Drk gry calc very fine to fine gry ss w/calc veins w/irreg inter drk gry s.
1270	1287	17	Lower Mancos form. Drk gry, calc sh.

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A blank 10x10 grid for graphing, consisting of 10 columns and 10 rows of squares.

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

9-21-57 Well. 1202 - 1240 w/25p/lc pumped 100 gal. mud acid into
Completed drilling.
9-22-57 The sum of the above is 1027 w/gal. pumped 60 gal. mud acid into
Date _____ Title _____

Date		Section		Recovery	
9-17-57	from No. 1	1194 - 1245	No. 4, from	45' core	
9-18-57	from No. 1	1124 - 1160	No. 2, from	44' core	
9-18-57	from No. 1	1075 - 1124	No. 6, from	49' core	

CASING RECORD

HISTORY OF OIL OR GAS WELL						
It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, logging, sidetracking, or letting the well, giving 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 balling.						
Casing per foot	Weight per foot	Threads per inch	Makes	Amount	Kind of shoe	Cut and pulled from
Size casing						
						Purposes
						Perforated
						From To

MUDDING AND CEMENTING RECORD

[illegible]

PLUGS AND ADAPTERS

Adapters—Material	Size
Heaving plug—Material	Length
	Depth set

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from	feet to	feet, and from	feet to
Cable tools were used from	feet to	feet, and from	feet to

DATE

If gas well, cu. ft. per 24 hours emulsion; % water; and % sediment.	The production for the first 24 hours was	Put to producing
Gallons gasoline per 1,000 cu. ft. of gas Gravity, °Bé.	barrels of fluid of which % was oil: %	19--

EMPLOYEES

Driller			
Driller			

FORMATION RECORD

FROM	TO	TOTAL FEET	FORMATION
100	105	5	CLAY
105	110	5	CLAY
110	115	5	CLAY
115	120	5	CLAY
120	125	5	CLAY
125	130	5	CLAY
130	135	5	CLAY
135	140	5	CLAY
140	145	5	CLAY
145	150	5	CLAY
150	155	5	CLAY
155	160	5	CLAY
160	165	5	CLAY
165	170	5	CLAY
170	175	5	CLAY
175	180	5	CLAY
180	185	5	CLAY
185	190	5	CLAY
190	195	5	CLAY
195	200	5	CLAY
200	205	5	CLAY
205	210	5	CLAY
210	215	5	CLAY
215	220	5	CLAY
220	225	5	CLAY
225	230	5	CLAY
230	235	5	CLAY
235	240	5	CLAY
240	245	5	CLAY
245	250	5	CLAY
250	255	5	CLAY
255	260	5	CLAY
260	265	5	CLAY
265	270	5	CLAY
270	275	5	CLAY
275	280	5	CLAY
280	285	5	CLAY
285	290	5	CLAY
290	295	5	CLAY
295	300	5	CLAY
300	305	5	CLAY
305	310	5	CLAY
310	315	5	CLAY
315	320	5	CLAY
320	325	5	CLAY
325	330	5	CLAY
330	335	5	CLAY
335	340	5	CLAY
340	345	5	CLAY
345	350	5	CLAY
350	355	5	CLAY
355	360	5	CLAY
360	365	5	CLAY
365	370	5	CLAY
370	375	5	CLAY
375	380	5	CLAY
380	385	5	CLAY
385	390	5	CLAY
390	395	5	CLAY
395	400	5	CLAY
400	405	5	CLAY
405	410	5	CLAY
410	415	5	CLAY
415	420	5	CLAY
420	425	5	CLAY
425	430	5	CLAY
430	435	5	CLAY
435	440	5	CLAY
440	445	5	CLAY
445	450	5	CLAY
450	455	5	CLAY
455	460	5	CLAY
460	465	5	CLAY
465	470	5	CLAY
470	475	5	CLAY
475	480	5	CLAY
480	485	5	CLAY
485	490	5	CLAY
490	495	5	CLAY
495	500	5	CLAY
500	505	5	CLAY
505	510	5	CLAY
510	515	5	CLAY
515	520	5	CLAY
520	525	5	CLAY
525	530	5	CLAY
530	535	5	CLAY
535	540	5	CLAY
540	545	5	CLAY
545	550	5	CLAY
550	555	5	CLAY
555	560	5	CLAY
560	565	5	CLAY
565	570	5	CLAY
570	575	5	CLAY
575	580	5	CLAY
580	585	5	CLAY
585	590	5	CLAY
590	595	5	CLAY
595	600	5	CLAY
600	605	5	CLAY
605	610	5	CLAY
610	615	5	CLAY
615	620	5	CLAY
620	625	5	CLAY
625	630	5	CLAY
630	635	5	CLAY
635	640	5	CLAY
640	645	5	CLAY
645	650	5	CLAY
650	655	5	CLAY
655	660	5	CLAY
660	665	5	CLAY
665	670	5	CLAY
670	675	5	CLAY
675	680	5	CLAY
680	685	5	CLAY
685	690	5	CLAY
690	695	5	CLAY
695	700	5	CLAY
700	705	5	CLAY
705	710	5	CLAY
710	715	5	CLAY
715	720	5	CLAY
720	725	5	CLAY
725	730	5	CLAY
730	735	5	CLAY
735	740	5	CLAY
740	745	5	CLAY
745	750	5	CLAY
750	755	5	CLAY
755	760	5	CLAY
760	765	5	CLAY
765	770	5	CLAY
770	775	5	CLAY
775	780	5	CLAY
780	785	5	CLAY
785	790	5	CLAY
790	795	5	CLAY
795	800	5	CLAY
800	805	5	CLAY
805	810	5	CLAY
810	815	5	CLAY
815	820	5	CLAY
820	825	5	CLAY
825	830	5	CLAY
830	835	5	CLAY
835	840	5	CLAY
840	845	5	CLAY
845	850	5	CLAY
850	855	5	CLAY
855	860	5	CLAY
860	865	5	CLAY
865	870	5	CLAY
870	875	5	CLAY
875	880	5	CLAY
880	885	5	CLAY
885	890	5	CLAY
890	895	5	CLAY
895	900	5	CLAY
900	905	5	CLAY
905	910	5	CLAY
910	915	5	CLAY
915	920	5	CLAY
920	925	5	CLAY
925	930	5	CLAY
930	935	5	CLAY
935	940	5	CLAY
940	945	5	CLAY
945	950	5	CLAY
950	955	5	CLAY
955	960	5	CLAY
960	965	5	CLAY
965	970	5	CLAY
970	975	5	CLAY
975	980	5	CLAY
980	985	5	CLAY
985	990	5	CLAY
990	995	5	CLAY
995	1000	5	CLAY

FOI D / KAVPK