

COUNTY	FIELD Wildcat		STATE	NM
WC OPR	THE PURE OIL COMPANY			MAP
1 Red Hills Unit				
Sec. 32, T-25-S, R-33-E				
330' fr S Line & 2310' fr E Line of Sec.				
Spud 2-24-63; Comp 12-26-64 (Wolfc) CLASS				
Comp 12-26-64 (Penn)				
CSG & SX - TUBING	FORMATION	DATUM	FORMATION	DATUM
30" 26'	LOG:			
20" 804' 2550	Del Sd 4892			
13 3/8" 6155' 6060	Ch. Can 6170			
10 3/4" 12938' 1235	B Spg 9020			
8 5/8" 12421-14299' 1400	1st B Spg			
7 5/8" 16952' 1326	Sand 9975			
LOGS EL GR RA IND HC2nd B	Spg Sd 10730			
TD 21321', PBD 14869'				
IP Wolfcamp Perfs 13440-667' CAOF 15,750 MCFGPD. Pot. Based on 4-point test, GOR 23,040, gravity gas .643, gravity cond. 60., SIWHP 8063#.				
IP Pennsylvanian Perfs 14607-864' CAOF 26,500 MCFGPD. Pot. Based on 4-point test, gravity gas .580, gravity cond. 59.6, SIWHP 4426#.				
Distribution limited and publication prohibited by subscribers' agreement. Reproduction rights reserved by Williams & Lee Scouting Service, Inc.				
CONT. Sharp Drlg. Co.			PROP DEPTH 22,000' TYPE	
DATE				

F.R. 2-7-63; Oper's Elev. 3382' SCF.
 PD 22,000' Rt - Ellenburger
 Contractor - Sharp Drlg. Co.

2-25-63 TD 39', WOC.
 3-4-63 Drlg. 805' anhy.
 3-11-63 Drlg. 3456' anhy & salt.
 3-18-63 Drlg. 4853' anhy.
 3-25-63 TD 6655', running logs.
 4-1-63 TD 6655', SD Rig Repairs.
 4-15-63 Drlg. 8155' lm. & sh.
 DST (Cherry Canyon) 6710-6747', open 1 hr,
 rec 30' drlg wtr + 60' salt wtr,
 30 min ISIP 2690#, FP 55-85#,
 30 min FSIP 2050#.

4-22-63 Drlg. 9290' lm. & sh.
 4-29-63 Drlg. 9896' lm. & sh.
 5-6-63 Drlg. 10445' lm. & sh.

SAMPLE TOPS: Delaware Sand 4904', Bone Spring 9220'.

5-6-63 - cont. -
DST 9663-9896', open 1 hr 30 mins,
GTS 17 mins @ 7.5 MCFGPD,
Rec 180' DM, 80' HG&SOCM + 100' HO&GCM,
1 hr ISIP 1300#, FP 65-65#, 1 hr FSIP 2122#.
5-13-63 Drlg. 11012' lm. & sh.
5-20-63 Drlg. 11507'.
5-27-63 Drlg. 12056' lm. & sd.
DST 11820-12055', open 1 hr,
Rec 1500' WB + 110' VSGCM,
1 hr ISIP 1495#, FP 730-730#,
2 hr FSIP 1625#.
6-3-63 Drlg. 12797' lm.
6-10-63 Drlg. 13304'.
6-17-63 1 1/2" 13304' lm. & sh., mixing mud.
@ 13304', well blew out, gas vol. estimated

12,000 MCFGPD.
6-24-63 TD 13475', mixing mud.
Squeezed OH 12720-842' W/100 sx.
7-13-63 TD 13475' lm. & sh., prep to run 10 3/4"
casing.
7-18-63 TD 13475' lm. & sh., attempting to squeeze
perf @ 12717'.
Perf 10 3/4" casing @ 12717' W/4 shots &
Squeezed 100 sx.
7-22-63 TD 13475' lm. & sh., circulating hole.
DO cement to 8393'.
7-29-63 TD 13475' lm. & sh., mixing mud.
Drilled cement to 12860', well started kicking.
8-5-63 TD 13475' lm. & sh., fishing.
Squeezed 10 3/4" casing w/200 sx.
8-13-63 TD 13475' lm. & sh., prep to run DST over perf
@ 12717'.

8-19-63 TD 13475', circulating after drilling out.
DST 12130-13475', no time,
Drill pipe full of water
Rev out water
FP 7375-8225#, 1 hr 5 min FSIP 10400#.
HP 10205-10200# (No estimate of gas)
Re-squeezed perf @ 12717' W/180 sx.

8-26-63 Drlg. 13511' lm., sh. & ch.
Cored 13475-499', rec 24' blk sh., w/lm
strks, NS.
DST 12650-13499', open 6 hrs 24 mins,
Used full string of WB,
Unloaded WB, MTS 1 hr 33 mins,
Flwd est 12,000 MCFGPD, SFP 1700#.
Top Chart:
1 hr ISIP 11240#, FP 9205-8750#,

2 hr FSIP 1040#.
Bottom Chart:
1 hr ISIP 11280#, FP 4215-4345#,
2 hr FSIP 9915#.

9-3-63 TD 13613', WOC.
Lost circ @ 13612'
Squeezed open Hole w/750 sx.

9-9-63 Drlg. 13939' lm., sd. & ch.

9-23-63 Drlg. 14188' sh.

9-30-63 Drlg. 14320' sh.

10-7-63 TD 14422', prep to cement 8 5/8" liner.

10-14-63 TD 14422', prep to drill out.

10-21-63 TD 14422', tstg liner.

10-28-63 TD 14473', fshg.

11-4-63 TD 14473', WOC.
Set Cement plugs 14345-14000'.
SAMPLE TOPS: 1st Bone Spring Sand 10004',
Strawn 14340'.

11-11-63 TD 14473', fshg.
Re-Squeezed 8 5/8" liner w/1550 sx.
11-18-63 Drlg. 14649' lm., sd. & sh.
11-26-63 TD 14814', prep to kill well.
Well blew out @ 14814',
No estimate on gas volume
12-2-63 TD 14814', mixing mud.
12-9-63 TD 14814', mixing mud.
12-16-63 Drlg. 14973' lm. & sh.
12-30-63 Drlg. 15110' lm. & sh.
1-6-64 Drlg. 15225' lm., sh. & ch.
1-13-64 Drlg. 15370'.
Lost circulation @ 15252'.
1-20-64 Drlg. 15656' lm., sh. & sd.
1-27-64 Drlg. 15923' lm. & sh.
2-3-64 Drlg. 16192' lm. & sh.

2-10-64 Drlg. 16455' sh.
2-17-64 Drlg. 16757' sh.
2-24-64 Drlg. 16998' lm. & sh.
Lost circulation @ 16918'.
3-2-64 TD 17066' lm. & sh., lost circulation.
3-9-64 TD 17066' lm. & sh., lost circulation.
3-16-64 TD 17066', running 6 5/8" liner.
3-23-64 Drlg. 17151'
(Tied 7 5/8" casing into 6 5/8" liner)
3-30-64 Drlg. 17455'.
4-6-64 TD 17638', on DST.
DST (Devonian) 17464-575', open 4 hrs,
Used 7500' WB + 1800# N2B,
Flwd 7000 MCFGPD decreasing to 2300 MCFGPD
@ end of test + unestimated amount of sul wtr,
rec 1860' muddy sul wtr,
1 hr ISIP 7561#, FP 5719-897#,
2 hr FSIP 7561#.

4-6-64 - cont. -
Cored 17575-584', rec 8.5' dolo., w/scatt
PPP & trace of stain.
Cored 17584-610', rec 25' dolo., highly
frac., w/scatt vugs & PPP.
Cored 17610-638', rec 20.5' dolo., frac.,
PP & Vuggy Porosity.
4-13-64 Drlg. 17946' dolo.
DST 17597-638', open 4 hrs,
GTS 2 hrs 8 mins @ 478 MCFGPD decreasing
to 64 MCFGPD @ end of test,
Rec 1984' HGC Blk Sul Wtr,
1 hr ISIP 7561#, FP 5456-1864#,
1 hr FSIP 7605#.
Cored 17638-672', rec 32.5' dns dolo.,

w/9' scatt PP & Vuggy Poro., NS.
Cored 17672-687', rec 8' dolo., w/scatt
fracs & vugs.
Cored 17687-693', rec 5' dolo., w/scatt
fracs & tr. PPP & Vugs.
DST 17469-693', open 7 hrs,
GTS 5 mins
Flwd 3000 MCFGPD + 12 B Blk Salty Sul Wtr PH,
Rec 1580' sul wtr,
1 hr ISIP 7561#, FP 2127-2829#,
3 hr FSIP 7561#.
SAMPLE TOPS: Morrow 15,000', Woodford 17303',
Devonian 17454'

4-20-64 Drlg. 18289' lm. & dolo.
4-27-64 Drlg. 18485' dolo. & sh.
5-4-64 TD 18710' dolo., lost circulation
DST 18555-700', open 2 hrs 45 mins,
Used 2000' WB + N2B
Rev out 13 bbls WB + 170 bbls salt wtr,
1 hr 30 min ISIP 8021#, FP 7543-8021#,
1 hr 30 min FSIP 8021#.
5-11-64 Drlg. 19022' dolo.
5-18-64 Drlg. 19190' dolo. & sh.
5-25-64 Drlg. 19368' lm.
6-1-64 Drlg. 19705' lm. & sh.
6-8-64 Drlg. 19787' sd. & sh.
6-15-64 Drlg. 19958' lm., sd. & sh.
6-22-64 Drlg. 20021' lm., sd. & sh.

6-29-64 Drlg. 20076' lm., sd. & sd.
7-6-64 Drlg. 20209' dolo. & lm.
7-13-64 Drlg. 20425' dolo. & sh.
Cored 20232-246', rec 6' dns frac dolo., w/NS.
Cored 20246-262', rec 15' dns dolo., w/NS.
Cored 20391-411', rec 18' dolo., w/NS.
7-20-64 Drlg. 20648'.
Cored 20472-532', rec 14' dolo., w/NS.
DST 20198-532', open 3 hrs 30 mins,
Used 1500# N2B
GTS 2 hrs 30 mins @ TSTM,
Rec 1400' HGCM & Wtr,
30 min ISIP 3225#, FP 2242-420#,
1 hr 30 min FSIP 1008#.
SAMPLE TOPS: Fussel an 18585', Joins 20080'.

7-27-64 TD 20922', pulling core.
8-3-64 Drlg. 21132' dolo. & sh.
Cored 20890-922', rec 27½' dolo., w/scatt
PPP & bldg gas.
Cored 20922-936', rec 12' being:
1½' dolo., w/vuggy to PPP & sli bldg gas;
10½' dns cherty dolo., w/NS.
DST 20433-936', open 4 hrs,
GTS 2 hrs 12 mins @ TSTM,
Rec 3100' gas & Salt WCM,
1 hr ISIP 7251#, FP 2404-1043#,
2 hr FSIP 1723#.
8-10-64 Drlg. 21321' dolo.
8-17-64 TD 21321', PBD 18295', WOC.
DST 20909-21321', pkr failed.
PB to 18295'.

8-24-64 TD 21321', PBD 18007', prep to perf.
4½" liner 16700-18094' W/166 sx.
8-31-64 TD 21321', PBD 17590', flowing to pits.
Perf 17637-638' W/3 SPF
Formation would not break
Perf 17663-684' W/2 SPF
Ac. 3024 gals perfs 17663-684'.
Flwd small amount of gas, TSTM.
Set Ret. @ 17590' & squeezed perfs 17663-
684' W/50 sx.
Perf 17476-492', 17523-544' W/2 SPF.
Ac. 5000 gals.
9-8-64 TD 21321', PBD 17590', WOC.
S & F 10,400 MCFGPD for 3 hrs thru 26/64"
chk. 17476-544'.
Squeezed perfs 17476-544' W/150 sx.

9-14-64 TD 21321', PBD 17590', WOC.
Perf 15190-191' W/4 shots
Squeezed perfs 15190-191' W/600 sx.
Perf 14970-971' W/4 shots
Squeezed perfs 14970-971' W/400 sx.
9-28-64 TD 21321', PBD 17590', drlg out cmt @ 14414'.
Perf 14806-807' w/4 shots
squeezed perfs 14806-807' W/200 sx.
Perf 14570-571' W/4 shots
squeezed perfs 14570-571' W/200 sx.
Perf 14436-437' w/4 shots
squeezed perfs 14436-437' W/200 sx.
10-5-64 TD 21321', PBD 17590', drlg retainer @ 14976'.
10-12-64 TD 21321', PBD 17590', prep to swab.
Perf @ 15442', 15447', 15458', 15468', 15486',
15490', 15530' W/1 SPI

Attempted to acidize, had hole in tubing.
Perf @ 15034', 15041', 15060', 15081', 15124',
15126', 15138' W/1 SPI.
Ac. 500 gals. 15034-530'.
10-19-64 TD 21321', PBD 17590', flowing to clean up.
Re-Ac. 1100 gals 15034-530'.
Flwd 8 BAW & died.
Squeezed perfs 15034-530' W/200 sx.
Perf (Pennsylvanian) @ 14840', 14844', 14852',
14856', 14864' W/2 SPI
Ac. 2000 gals.
Flwd dry gas @ rate of 160 MCFGPD thru 1/2"
chk. for 2½ hrs, TP 430#.
Re-Ac. 5000 gals. 14840-864'.
Flwd 2300 MCFGPD thru 1/2" chk., flwd for 12
hrs, TP 600#.

10-19-64 - cont. -
Set BP @ 14812'
Perf (Pennsylvanian) 14607-611', 14618-632',
14643-652', 14658-662', 14706-712', 14716-
721', 14737-742', 14748-752', 14758-764',
14772-776', 14784-788' W/1 SPF

10-26-64 TD 21321', PBD 17590', WOC.
Flwd 10,700 MCFGPD + 91 B Cond. per million
for 6 hrs thru 18/64" chk. 14607-788'.
Set BP @ 14550'
Perf 14350-358', 14400-408', 14416-432',
14438-452', 14462-470', 14476-484', 14488-
494' W/1 SPF
Ac. 2000 gals.,
failed to flow.

Set Retainer @ 14325'
Squeezed perfs 14350-494' W/200 sx.
Perf 13596-597' W/4 shots
Squeezed perfs 13596-597' W/200 sx.

11-2-64 TD 21321', PBD 17590', prep to test.
Re-squeezed perfs 13596-597' W/200 sx.
Perf (Wolfcamp) 13622-643', 13659-667' W/1 SPF.

11-9-64 TD 21321', PBD 17590', WOC.
Flwd 9600 MCFGPD + 24.9 B Cond. per million
for 6 hrs 45 mins thru 18/64" chk., TP 4750#,
13622-667'.
Perf (Wolfcamp) 13440-446', 13469-474', 13490-
498', 13504-512' W/1 SPF
Flwd 12,300 MCFGPD thru 20/64" chk., TP 3125#.
Set Retainer @ 13420'
Squeezed perfs 13440-512' W/200 sx.

- 11-16-64 TD 21321', PBD 17590', WOC.
Set retainer @ 13403'
Squeezed perfs 13622-667' W/200 sx.
Re-squeezed perfs 13659-667' W/200 sx.
- 11-23-64 TD 21321', PBD 17590', prep to dual complete.
- 11-30-64 TD 21321', PBD 14869', SI.
Drld out to 14873' (4' fish in hole)
Re-Perf (Wolfcamp) 13440-446', 13469-474',
13490-498', 13504-512', 13622-643', 13659-
667' W/4 SPF
- 12-7-64 TD 21321', PBD 14869', fshg packer.
- 12-14-64 TD 21321', PBD 14869', changing out equipment.
- 12-21-64 TD 21321', PBD 14869', MO Rotary.
Ac. 1000 gals. 13440-667'.
Flowed to clean up thru 1" chk., TP 1400#
(Wolfcamp); TP 1600# (Pennsylvanian)
-
- 1-4-65 TD 21321', PBD 14869', WO Potential.
- 1-11-65 TD 21321', PBD 14869', tstg.
Flwd 10,800 MCFGPD thru 20/64" & 15/64" chks.,
TP 3470# perfs 13440-667'.
Flwd 15,700 MCFGPD thru 38/64" ch., TP 1860#.
perfs 14607-864'.
- 1-18-65 TD 21321', PBD 14869', tstg.
Flwd 10,700 MCFGPD + 521 B Cond. PD thru
23/64" & 17/64" chks., TP 3100# 13440-667'.
Flwd 6500 to 7500 MCFGPD on 2 hr test thru
26/64" chk., TP 1375-1350# (Tubing Plugged)
from perf 14607-864'.
- 1-25-65 TD 21321', PBD 14869', tstg.
Flwd 11,750 MCFGPD + 495 B Cond. in 24 hrs thru
21/64" & 16/64" chk., TP 3522-3233#. 13440-667'.
Pennsylvanian tubing plugged.
- 2-1-65 TD 21321', PBD 14869', COMPLETED.
(Holding for 4-point gauges).

2-8-65 TD 21321', PBD 14869', Completion Reported.
FOUR-POINT GAUGES FROM WOLFCAMP PERFS:

<u>MCFGPD</u>	<u>Choke</u>	<u>TP</u>
3011	11/64"	7395#
5180	14/64"	6689#
7851	18/64"	5525#
10069	21/64"	4420#

(Time not reported)

(Flwd 11,583 MCFGPD in 24 hrs thru 25/64"
chk., TP 3256#)

FOUR-POINT GAUGES FROM PENNSYLVANIAN PERFS:

<u>MCFGPD</u>	<u>Choke</u>	<u>TP</u>
3652	11/64"	4057#
9792	21/64"	3295#
12721	27/64"	2831#
15612	38/64"	1898#

(Time not reported)

LOG TOPS: Wolfcamp 11643', Strawn 14275',
Atoka 14530', Morrow 15020', Mississippian
Lime 16894', Mississippian Chert 17020',
Woodford 17265', Devonian 17424', Fusselman
18580', Montoya 19000', Simpson 19407', Joins
20078', Ellenburger 20189'.

SAMPLE TOP: Weathered Basement Rock 21275'.

ADDITIONAL

197

1974-1975

1974-1975

1974-1975

1974

1974

1974

1974

1974-1975

1974-1975

1974-1975

1974

1974

1974

1974

1974-1975

1974-1975

1974-1975

1974-1975

1974-1975

1974-1975

1974-1975

1974-1975

.. M E N D E D

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-28
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator Union Oil Company of California			Lease Red Hills		Well No. 1
Unit Letter 0	Section 32	Township 25 South	Range 33 East	County Lea	
Actual Footage Location of Well: 330 feet from the South line and 2310 feet from the East line					
Ground Level Elev. 3,386'	Producing Formation Wolfcamp		Pool Red Hills Wolfcamp		Dedicated Acreage: 640 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation State approved drilling unit.

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name *Bill Johnson*
Position
District Office Manager
Company
Union Oil Co. of California
Date
June 7, 1966

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

