

FILE NOTATIONS

Entered in N I D File ✓

Entered On S R Sheet _____

Location Map Pinned ✓

Card Indexed ✓

I W R for State or Fee Land _____

Checked by Chief R. L. L.

Copy N I D to Field Office ✓

Approval Letter ✓

Disapproval Letter _____

COMPLETION DATA:

Date Well Completed 1-21-61

OW X WW _____ TA _____

GW _____ OS _____ PA _____

Location Inspected _____

Bond released _____

State of Fee Land _____

LOGS FILED

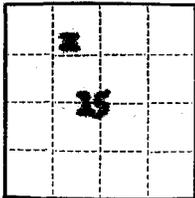
Driller's Log H-27-60

Electric Logs (No.) 9

E- 1 E-1 2 GR _____ GR-N _____ Micro ✓

Lat ✓ Gamma Ray _____ Neutron _____ Mi-L _____ Sonic ✓ Others Radioactivity log

Section Gauge - Continuous - Dipmeter - Directional log



(SUBMIT IN TRIPPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office **Salt Lake City**
Lease No. **U-09179 (Arnold)**
Unit _____

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL _____	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF _____	
NOTICE OF INTENTION TO CHANGE PLANS _____		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING _____	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF _____		SUBSEQUENT REPORT OF ALTERING CASING _____	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL _____		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR _____	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE _____		SUBSEQUENT REPORT OF ABANDONMENT _____	
NOTICE OF INTENTION TO PULL OR ALTER CASING _____		SUPPLEMENTARY WELL HISTORY _____	
NOTICE OF INTENTION TO ABANDON WELL _____			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Vernal, Utah August 12, 1960

Well No. **Arnold 21-15** is located **Approximately 600** ft. from **N 101** line and **2060** ft. from **15 W** line of sec. **15**

1/4 Sec. 15 (1/4 Sec. and Sec. No.) **T30S** (Twp.) **R11W** (Range) **5M** (Meridian)

Lisbon (Field) **San Juan** (County or Subdivision) **Utah** (State or Territory)

The elevation of the derrick floor above sea level is **6334.5** ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

It is proposed to drill a new well to produce oil and gas from Mississippian and Devonian McCracken sands at a total depth of 8900'.

Cement 13 1/8", 5 1/2", J-55 casing at 1000' with 800 sax cement cut in 17 1/4" hole.

Cement 7 5/8", 29.70#, N-80 casing over McCracken productive interval with 2000 sax salt cut in 9 7/8" hole.

Core 6 1/2" hole through McCracken productive interval and complete barefoot from McCracken. Mississippian to be exposed dually at future date.

Est. Formation Tops

Gutler	2630	Base Salt	7860
Harnosa	3465	Mississippian	8100
Paradox	3700	Devonian	8560

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Top Salt **4900**

Company **Standard Oil Company of California, Western Operations, Inc.**

Address **P. O. Box 455**

Vernal, Utah

By **C. V. CHATTERTON** 8/12/60

Title **District Superintendent**

USGS-1; **04000-1**; **JST-01-1**
File-1; USGS, Durango-1

COMPANY STANDARD OIL COMPANY OF CALIFORNIA

Well Name & No. 21-15

Lease No.

Location 500' FROM THE NORTH LINE AND 1940' FROM THE WEST LINE

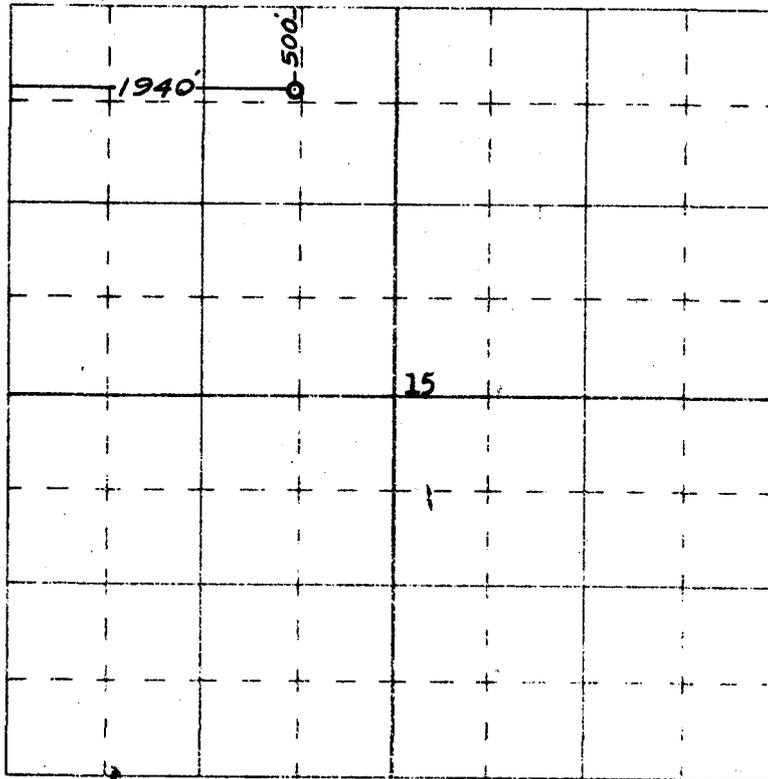
Being in NE $\frac{1}{4}$ NW $\frac{1}{4}$

Sec. 15 T 30 S, R 24 E, S.L.M.

SAN JUAN COUNTY, UTAH

Ground Elevation 6322.5

Reference Points
150' N, E, S, AND
100' W of Location.



T.B.M. X on Sandstone
Outcrop 150' East of
Location.
Elev. 6332.5

Scale — 4 inches equals 1 mile

Surveyed

16 July

, 19 60

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.



James P. Leese
Registered Land Surveyor.
James P. Leese
Utah Reg. No. 1472

SAN JUAN ENGINEERING CO., FARMINGTON, NEW MEXICO

August 15, 1960

Standard Oil Company of California
Western Operations, Inc.
P. O. Box 455
Vernal, Utah

Attention: G. V. Chattarton, Dist. Superintendent

Gentlemen:

This is to acknowledge receipt of your notice of intention to drill Well No. Arnold 21-15, which is to be located 660 feet from the north line and 1960 feet from the west line of Section 15, Township 30 South, Range 24 East, SLM, San Juan County, Utah.

Please be advised that insofar as this office is concerned approval to drill said well is hereby granted.

This approval terminates within 90 days if the above mentioned well has not been spudded in within said period.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT,
EXECUTIVE SECRETARY

CBF:awg
cc: Jerry W. Long, Dist. Eng.
U. S. Geological Survey
Durango, Colorado

**STANDARD OIL COMPANY OF CALIFORNIA,
WESTERN OPERATIONS, INC.**

P. O. BOX 455

VERNAL • UTAH

PRODUCING DEPARTMENT
C. V. CHATTERTON
DISTRICT SUPERINTENDENT

September 7, 1969

U. S. Geological Survey
Jarvis Building
Durango, Colorado

Attention: Mr. Jerry Long

Gentlemen:

Attached is the final location plat map for Standard
Arnold 21-15, Lisbon Field, San Juan County, Utah.

Yours truly,

Original Signed
C. V. CHATTERTON

C. V. CHATTERTON

cc: U. S. Geological Survey, Salt Lake City
Oil & Gas Conservation Commission
J. E. Toussaint-GM

COMPANY **STANDARD OIL COMPANY OF CALIFORNIA**

Well Name & No.

Lease No.

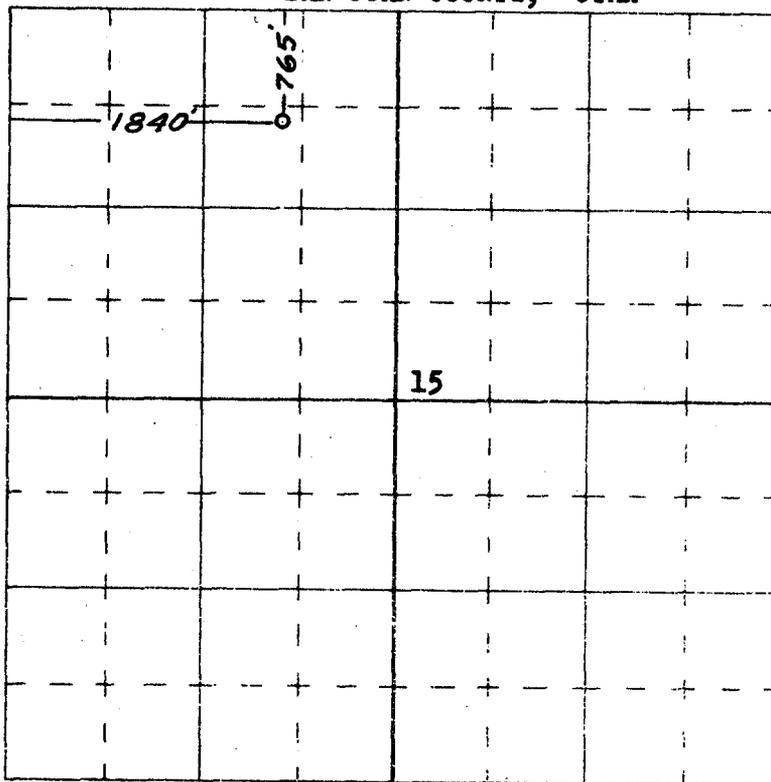
Location **765' FROM THE NORTH LINE AND 1840' FROM THE WEST LINE**

Being in **NE $\frac{1}{4}$ NW $\frac{1}{4}$**

Sec. **15**, T **30 S**, R **24 E**, S.L.M.

Ground Elevation, Graded **6294.6**

SAN JUAN COUNTY, UTAH



Scale — 4 inches equals 1 mile

Surveyed **September 1**

19 **60**

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.



James P. Leese
Registered Land Surveyor.

James P. Leese
Utah Reg. No. 1472

SAN JUAN ENGINEERING CO., FARMINGTON, NEW MEXICO

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake City
Lease No. U-09179 (Arnold)
Unit _____

	X	
	15	

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
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NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	X
NOTICE OF INTENTION TO ABANDON WELL		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Vernal, Utah December 8, 1960

Well No. Arnold 21-15(1) is located 765 ft. from N line and 1840 ft. from EX line of sec. 15
SW 1/4 Sec. 15 308 24E 312M
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Lisbon San Juan Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 6306 ft. (Corrected from original report)

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Well was spudded September 6, 1960.
 September 14, 1960 Cemented 13-3/8" 54.5# 2-55 casing at 1205' with 800 sack cement containing 2% calcium chloride.
 November 16, 1960 Cemented 7-5/8" 33.7# 2-80 casing at 9046' with 1100 sack salt saturated 50-50 Fomix cement, followed by 200 sack Latex cement.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Standard Oil Company of California, Western Operations, Inc.
 Address P. O. Box 455
Vernal, Utah
 By C. V. CHRISTENSEN 12/8/60
 Title District Superintendent

USGS-3; G2000-1; J21-04-1;
File-1

STORY OF OIL OR GAS WELL

Well No. Arnold 21-15 (1) was spudded September 6, 1960. Drilled 7-7/8" hole to 1225'. Opened 7-7/8" hole to 12-1/4", 0' - 1215'. Opened 12-1/4" hole to 17-3/8", 0' - 1205'. Cemented 13-3/8", 54.5#, J-55 csg at 1205' with 800 sack common cement treated with 2% CaCl₂. Drilled 9-7/8" hole 1205' - 4350'.

Casing detail:

All 31 jts, 1222.36', 13-3/8", 54.5#, J-55, 8 rnd, short, range 3, new J&L smls casing.

September 27, 1960

Ran Schlumberger IES, Microlog and Directional Survey 4350-1205'. Top Hermosa 2490', top Paradox "A" 4000', top Salt 4350'.

September 28, 1960 to October 18, 1960

Drilled 9-7/8" hole 4350-8223'.

October 19, 1960

DST #1 8129-8223'. Set packers at 8129' and 8124'. Used 1000' of water cushion. Opened tool at 9:35 A.M., had weak blow steadily increasing to strong. Shut in for 45 min ISIP, gas to surface at 9:55 A.M. Opened to trap at 10:25 A.M. Worked on trap to 11:15 A.M., turned gas to trap at 1,435 M/D rate. Water cushion and mud to surface at 10:33. Gauged gas through trap with 1400 psi surface pressure at 215 M/D to 2190 M/D rates. Took 1 hour flow, 1 hour FSIP, pulled packers at 1:15 P.M. Est 185 B/D condensate, 1181 GOR. Rec. 1000' of sulphurous muddy water.

Pressures	Hydro	ISIP	Flow	FSIP
Top	4218	2823	1162-2332	2798

October 20, 1960 to October 22, 1960

Drilled 9-7/8" hole 8223-8370'.

October 23, 1960

DST #2 8222-8370'. Set packers at 8217' and 8222'. Opened tool for 2 min at 8:28 A.M. Closed in and took 30 min ISIP. Gas to surface at 8:35 A.M. Opened tool at 8:58 A.M., fluid to surface at 9:10 A.M. Gas gauged through trap at 1.341 MM/D rate at 300 psi trap pressure to 3.298 MM/D rate at 650 psi trap pressure. Only fluid was 7 bbl of very fluffy H₂S cut mud 10-25% condensate. Shnt tool in at 10:35 A.M. for FSIP. Pulled tools loose at 11:05 A.M. and backscuttled rise, an est 3 bbl of flack fluffy mud and 25% condensate. Unable to gauge rise accurately because lost returns. Pulled six stands and started mixing mud and LCM.

Pressures	IH	ICIP	IF	FF	FCIP	FH
Bottom	5126	2911	2557	2821	2886	5100

October 24, 1960 and October 25, 1960

Drilled 9-7/8" hole 8370-8472'.

October 26, 1960

DST #3 8370-8472'. Set packers at 8365' and 8370', tail to 8472'. Opened tool at 8:03 A.M. for 2 min initial flow. Next 30 min ICIP, next 4 hr 20 min flow (incl 65 min SI at surface) and 45 min FCIP. Closed at 8:05 A.M. to take 30 min ISIP. Gas to surface at 8:10 A.M. while tool shut in. Opened tool at 8:35, fluid cushion to surface in 4 minutes. Rate in 45 minutes was 3.150 MM/D gas with 3/4" surface bean and 1200 psi surface pressure, 650 psi separator pressure. Opened up to

separator at 10:45 A.M. at average 2.638 MM/D gas rate, 1/2" surface bean, 1400 psi a/c pressure, 655 separator pressure, 82° F separator temperature. 61.3° API condensate to a/c w/gas. Condensate is lt yellow green w/H₂S odor. Well gauged at 34.4 bbls first hour w/2.638 MM/D, making 3500 GOR. Results of second hour test avg rate 3.839 MM/D with 1/2" a/c bean, 1400 psi a/c pressure, 660 psi trap pressure, 82° trap temp, 23.3 bbls, 61.3° API oil. GOR is avg 6700, max 7000 scf/bbl. Closed tool in at 12:50 P.M. and took 45 min FSIP. Pulled tools loose at 1:35 P.M. and bled off pressure, pulled 25 stands and backscuttled out 12.5 bbls oil, slightly mud cut on bottom. Pulled out and rec 197' below backscuttle tool, all heavily mud cut condensate.

Pressures	IH	ISIP	FLOW PERIOD	FSIP
Middle	5045	2935	- 2726	2912

October 27, 1960
 Drilled 9-7/8" hole 8476-8523'.

October 29, 1960
 Ran Schlumberger logs as follows:
 Gamma Ray-Neutron-Laterlog 8508-1205'
 Gamma Ray-Sonic 8508-1205'
 Section Gauge 8509-4000'
 Top Mississippian 8098'
 Drilled 9-7/8" hole 8523-8530'

October 30, 1960 to November 3, 1960
 Drilled 9-7/8" hole 8530-8760'.

November 4, 5 and 6, 1960
 Took Core #1 - 8760-8820'. Recovered 60'. (9-13/16" hole)
 8760-8772' Lt brn to grey dol with inclusions green dol hairline fracs throughout. NOSCF, very dense.
 8772-8780' Dense lt gray-green dol with hairline fracs. Poor P.P.P. NOSCF.
 8780-8783' Lt grn shaley dol w/slickensides, calcite veinlets and hairline fracs throughout.
 8783-8787' Buff dol dense faint pet odor. Looks tite. Few hairline fracs.
 8787-8793' Bluish grn soy dol matrix w inclusions brecciated silicious brn dol 1/2" - 3" dia occ minor slickensides. Dull mottled brn fluor (dead oil stain) occ vugs to 1/2" filled with calcite also minor hairline fracs throughout.
 8793-8796' Gry gray shaley dol with stks fine-med grained well rounded quartz sand. Few minor slickensides, dull brn gold fluor.
 8796-8810' Same as 8787-8793'.
 8810-8815' Dk gy shaley and slightly sdy dol with stk dk gray shale hairline fracs NOSCF.
 8815-8819' Grn (glaucanitic?) dense shaley dol w occ slickensides and inclusions of brn cherty dol NOSCF.
 8819-8820' Brn cherty dolomitic shale.

November 7, 8 and 9, 1960
 Took Core #2 - 8820-8878'. Recovered 58'. (9-13/16" hole)
 8820-8825' Blue grey to grey, very fine xline. Dense dolomite. No visible porosity, fluorescence or stain.
 8825-8834' Grey to grey brown fine crystalline dolomite. Fair P.P. Porosity, numerous hairline vert to near vert fracs bleeding oil. Milky white fluor, fair pet odor, slight visible stain becomes dense at 8829 1/2 - 8830. Minor pods of brn marlstone at 8830'. Minor calcite veins on fracs.

- 8834-8835: Dense, lesser amount of fluor and porosity.
- 8835-8838: Blue to blue grey very fine xline dense slightly shaley dolomite. Pods of brn shale or marlstone very minor P.P. fluor and porosity.
- 8838-8841: Same as at 8825-8835.
- 8841-8845: Dense blue-blue grey dolomite, very rare P.P. fluor, porosity looks very tight, has abundant pods and bands of dark grey to brown shaley marlstone. Few minor slicks on frac.
- 8845-8847: Dense fine xlines grey to grey brown dolomite. Poor to fair P.P. porosity. Milky white fluor on P.P. and numerous bleeding fracs.
- 8847-8850: Same as at 8841-8845.
- 8850-8855: Dense fine to medium crystalline brown-green dolomite with fair to good P.P. porosity, numerous hairline fracs vert to near vert bleeding oil. Good milky white fluor, good pet odor.
- 8855-8870: Blue to blue grey very dense micro xline to fine xline dolomite. Numerous pods of blue & brn marlstone & shale. Large reworked pieces of very f xline dolomite in f xline sucrosic matrix. NOSCF.
- 8870-8871: Same as at 8850-8855.
- 8871-8872: Dense as 8855-8870, minor fluor.
- 8872-8873: Same as at 8850-8855.
- 8873-8876: Very fine xline sucrosic dense blue grey dolomite w/thin 1/2" to 2" pods and bands of dense green and brown marlstone. Minor slickensides, looks reworked.
- 8876-8878: Very fine xline, sucrosic blue grey dense dolomite.

November 10 and 11, 1960

Took Core #3 - 8878-8936'. Recovered 58', (9-13/16" hole)

- 8878-8880: Dolomite, slightly vuggy buff, with sandy stks to 1/2". Faint odor on fresh surface, slight mottled bright blue fluor w/occ pop of oil bleeding from core.
- 8880-8885: Dolomite, grn, with lt gy sands stks and inclusions NOSCF.
- 8885-8895: Dolomite, green, sandy, becoming sandier toward bottom. NOSCF.
- 8895-8898: Lt gy to lt brn oil stained dense dolomitic sandstone. Good pet odor on fresh break bleeding lt grn sweet oil, looks tight. Bright blue fluor very fine to fine grained subrounded to subangular. Top McCracken at 8895'.
- 8898-8904: Grn (glauconitic) sandy dolomite with stks dolomitic sand and occ dk gry marlstone stks NOSCF.
- 8904-8909: Grn sandy dolomite with subrounded to angular 1/2" to 1" inclusions and pods. Pink and brn sandy dolomite looks tight, NOSCF.
- 8909-8916: Gray dolomitic sanst fine to crs grained well rounded sand NOSCF. Sucrosic texture.
- 8916-8930: Lt gy to lt brn dolomitic sand st w/numerous stylolites and laminae of dk gy mudstone. Good pet odor. Bright bluish fluor bleeding lt green oil and gas, looks tight, occ inclusions of grn glauconitic material in top 4'. 1/32 to 1/16" dia excellent vert fracs from 8922-8926'.
- 8930-8936: Gy dolomitic sanst with numerous random hairline fracs. Bottom 2' broken when extracting from core bbl. NOSCF. Looks tight.

DST #4 8826-8936'. Opened tool at 10:10 A.M. for 5 min initial flow, 1 hr ICIP, 1 hr flow and 1 hr 5 min FCIP. Had a very light blow of air for 1 hr. No gas to surface. Rec 80' oil and gas cut mud. Est 5-10% light oil ditch sample tested 310,000 ppm 10.1#/gal and sample at tool tested 297,000 ppm and 9.6#/gal.

Pressures	IH	ICIP	IF	FF	FCIP	FH	
Middle Inside	4929	1732*	116	134	799*	4886	*Still building up

November 12 and 13, 1960

Took Core #4 - 8936-8994'. Recovered 58'. (9-13/16" hole)

8936-8940 Lt to dk gy very fine grained succrosic ortho-quartzite. Looks tite. NOSCF.

8940-8970' Lt brn mottled oil stained ortho-quartzite fine grained succrosic texture. Good oil odor. Bleeding oil and gas. Mottled lt blue fluor. Numerous hairline fracs and major fracs 8947-8950', 8951-8953', 8954-8956'. Perm & porosity varies with oil stain. Numerous 1/2" - 1" tight stks scattered throughout interval with 1' tight sand at 8958-8959'.

8970-8994' Lt gy fine grained succrosic ortho-quartzite with inclusions of dk gy qtzite grading to dk gy at bottom. NOSCF. Fracs 8980-8983', 8985-8990'. Trace pyrite toward bottom.

November 14 and 15, 1960

Took Core #5 - 8994-9050'. Recovered 56'. (9-13/16" hole)

8994-9000' Dark grey to greenish grey fine to med xline dolomite. No visible porosity, stain or fluor. Abundant olivine, horn blend and pyrite. Rare calcopyrite, very dense, possible slightly metamorphosed.

9000-9002' Black to grey black dolomitic shale, very dense, platy. Abundant micaceous material, schistosis appearance.

9002-9050' Dark grey, grey black and greenish grey fine to med xline dolomite with 1/4" to 3" stringers of black micaceous shale. Abundant olivine, horn blend, pyrites. All very dense, no visible porosity, no fluor.

Ran Schlumberger logs as follows:

Laterolog Gamma Ray-Neutron and recorded 8508-9051'.

Sonic-Gamma Ray log and recorded 9051-8507'.

Continuous dipmeter and recorded 9051-2600'.

Base McCracken 8974' (-2664'), top McCracken 8875' (-2568'), top Ouray 8605' (-2298').

November 16, 1960

Cemented 9077', 7-5/8", 33.7#, N-80 casing at 9046' w/1100 sax 50-50 pozmix followed w/200 sax neat latex.

Casing Detail:

All 312 jts, 9077.35', 7-5/8", 33.7#, N-80, 8 rnd, range 3, LTRC new J&L gals casing.

November 18, 1960

Drilled out cement to 9007' and displaced mud with saturated salt water.

November 19, 1960

Ran Lane Wells Gamma Ray-Collar Log and dual spaced neutron log. Recorded from 8990 to 7900'.

Ran Dowell Abrasijet tool and cut circular notch at 8962'.

November 20, 1960

Cut circular notch at 8945' and 8916'.

Cleaned out sand 8987-9007'.

Displaced salt water with #5 burner fuel.

November 21, 1960

Ran 201 jts 2-1/2" tubing open end, total 6991'. Hooked up Dowell fracing equipment. Tried to break down sand abrasive notches cut in 7-5/8" casing @ 8962, 8945, 8916' w/5200 psi. No success.

November 22, 1960

Ran Lane Wells PFC log. Check bottom @ 9007'. OK w/CO measurements. Checked and found notches in 7-5/8" casing @ 8968 and 8952'. Could not pick up notch @ 8916'. Above notches correlated w/Schlumberger log. Perforated casing w/super csg jets.

Four jets per foot 8966-8958', 8951-8941', 8920-8912'. Ran Dowell implosion bombs on Lane Wells line. Imploded capsule at notch 8968' and notch at 8952'. Closed complete shut off. Formation broke down at 3400 psi.

Hung 6991' 2-1/2" open end tubing in Dowell frac head. Sand-oil squeezed McCracken zone down 2-1/2" x 7-5/8" annulus with 22,000# 20-40 and 8,000# 10-20 Ottawa sand. Sand screened out after 184 bbls flush water in leaving an estimated 11,000# sand in formation and 19,000# in casing.

November 23, 1960

Cleaned out frac sand from 8763 to 9007'.

November 24, 1960

DST #5 of perfs 8912-8966'. Felt for bottom @ 9007' - OK. Picked up and set pkr @ 8998'. Tail @ 8915'. Took 3/4 hour ISI. 6:00-6:45 A.M. opened tool. Light blow 6:45 A.M. - 12:00 Noon, 5 hrs 15 min. HI-Z ran swab to 8500' - 5 times. No fluid swabbed. Tagged bottom @ 9007'. Pld up, reset tester @ 8990'. Open tool for 30 min. Slight blow as before tool open. OK. Closed in for 3 hr final shut in. Fl'd and rec 630' salt water, 110' #5 burner fuel.

Pressures	IH	ICIP	IF	FF	FCIP	FH
Middle	4495	3227	51	397	3006	4488

November 25, 1960

Ran Baker cast iron bridge plug and set in csg @ 8650'. Shot 4 - 1/2" holes per ft w/super casing jet 8618-8626'. Dowell acidized perfs 8616-8626' w/200 gal breakdown acid followed w/2000 gal retarded acid.

November 26 and 27, 1960

DST #6 of perforated int. 8616-8626'. Set packer at 8565'. Took 4 min initial flow, 50 min ICIP, next 3 hrs 8 min (to 12:45 P.M., 11-26-60) open flow test; next 5 hrs 45 min swabbing (to 6:30 P.M., 11-26-60). Next 7-1/2 hrs flowing (to 2:00 A.M., 11-27-60). Next 2-3/4 hrs shut in at surface (to 4:45 A.M. 11-27-60). Next 1-3/4 hrs flowing (to 6:30 A.M., 11-27-60). Next 3 hrs shut in at surface (to 9:30 A.M., 11-27-60). Last 3 hrs 35 min turned to trap (to 1:05 P.M., 11-27-60). Took 2 hr 5 min FCIP. Opened tool for flow test at 10:37 A.M. Had an est 25-35 M/D blow of air decreasing to less than 1/2 M/D rate at end of 1 hr. Gas and acid gas to surface after tool open 2 hrs 23 min (1:03 P.M.). Rugged up swabbing unit 12:45 P.M. Fluid level 2000'. Swabbed salt water till 1:03 P.M. then started getting acid gas grading to acid gas, gas and scum oil at 2:00 P.M. Continued swabbing till 5:30 P.M., making gas with salt water and black emulsion decreasing steadily from 95% to 60% and oil (48° API gravity) increasing from 5% to 40%.

Pressures	IH	ICIP	IF	FF	FCIP	FH
Top	4308	3105	2225	1144*		Clock ran down

* Last pressure after tool set 15-1/2 hours.

November 28, 1960

Ran HOWCO cast iron plug on McCullough wire line and set at 8601'. Ran McCullough super casing jets and perf'd intervals 8598-8794', 8566-8561' and 8530-8510' with 4 - 1/2" jets per foot. Used collar log, shot from collars.

November 29, 1960

DST #7 interval 8510-8598'. Swabbed well with F. I. at 2000', made seven runs with fluid rising to 1000'. Rec total of 31 bbls acid and brine water, blowing acid gas. At 10:45 well turned to trap, allowed well to clean up and partially stabilize rate, at 12:00 noon started 2-1/2 hr trap test. Gas rate increased from 1548 M/D at noon to 1703 M/D at 2:30 P.M. Oil rate averaged 700 B/D rate 2-1/2 hrs, avg GOR for 2-1/2 hrs 2360 scf/bbl. Cut 30% at flowline, est 5-10% at tank, gravity 50° API at 60° F, cloud point 38° F.

November 30, 1960

Lost 700 bbl water in perfs interval 8510-8598' before setting B.P. at 8500'. McCullough set Halliburton Model DC bridge plug at 8500'. Ran 2-1/2" tubing, circulated oil out of top of hole (470 bbl). Wellex shot 4 - 1/2" jet holes, intervals 8403-8405' and 8427-8429'.

December 1, 1960

Ran DST #8 interval 8403-8405' and 8427-8429'. Set packers at 8366'. Took 14 min IF, 49 min ISIP, opened tool to surface at 8:45 A.M., had weak blow steadily increasing to fair blow, gas to surface at 9:55 A.M. TSTM. Blow died at 11:00 A.M., shut tool in at 11:45 A.M. for 1 hr 40 min FSIP. Reversed out rise, recovered approximately 6100' all dark, gassy, sulfurous water w/scum oil. Res. .086

Pressures	IH	ICIP	IF	FF	FCIP	FH
Middle	3715	2824	36	3026	3033	3705

December 2, 1960

Acidized perfs 8403-8405' and 8427-8429' w/500 gallons BDA and 1500 gallons retarded acid as follows: Spotted acid to bottom of pkr, closed bag, pressured annulus to 1000 psi, held OK. Pumped in 13 bbls at 2500 psi at 6 BPM, shut down 6 min well on vacuum, pumped in 20 bbls at 5 BPM and 2000 psi, shut down well on vacuum, pumped in 20 bbls at 6.7 BPM and 1800 psi, shut down well on vacuum. Let acid soak.

December 3, 1960

Testing on DST #9. With RTTS pkr at 8370', tested intervals 8403-8405' and 8427-8429'. At midnight well flowing through 1/4" bean with 1600 psi sfc pressure, flowed well at reduced rate until 7:30 A.M. Average rate 991 M/D and 218 B/D 53° API oil for average GOR of 4546 scf/bbl. Opened well up at 8:30 A.M. at 3663 M/D rate and 480 B/D rate. Well averaged 527 B/D, 3741 M/D gas for average GOR of 7000, GOR dropped to 4870 scf/bbl last hour and well oil rate was increasing. Average cut 10%.

December 4, 1960

Drilled on cast iron bridge plug at 8500'.

December 5, 1960

Finish drilling up bridge plug at 8500'

December 6, 1960

HCT #10 of interval 8594-8598' to determine effectiveness of cement bond 8566-8594'. Set packer at 8566' with hole taking fluid. Reset pkr at 8566', hole kept taking fluid. Reset pkr twice at 8588', hole kept taking fluid. Attempted to close pipe rams w/no success. Pulled pkr up and reset 7:00 A.M., had a light blow of air for 15 min, then dead. Shut in at surface at 8:00 A.M. At 1:30 P.M. took initial shut in, filled hole and closed pipe rams, and left test tool shut in while thawing out rig.

December 7, 1960

Thawing out rig.

December 8, 1960

With packer set at 8241', closed rams, pressured annulus to 1000 psi. Held OK. Pulled loose at 8:00 A.M., tagged BP @ 8601', pulled up and set pck at 8577'. Hole took fluid at 3/4 bbl/min rate when perfs 8510-8598' were exposed. Set tool 8:45, took 15 min ICIP, opened tool 9:00 A.M., alternately had medium blow est 25-30 M/D air then went on vacuum. Made two swab runs, found fluid at sfc 10:45, had fluid to sfc flowing at est 0.1 BPM rate. Closed bag, pumped in 1 bbl and fluid rate at sfc increased to 1 BPM rate, indicating that communication exists between perforated int. 8561-8566' and 8594-8598'.

Pressures	IH	ICIP	IF	FF	FCIP	FH
Top	3738	2776	3695	3738	-	3738

December 9, 1960

Re-cemented 7-5/8" casing through 16-1/2" holes 8594-8598' through retainer at 8572'. Squeezed away 48 sacks cement below retainer.

December 10, 1960

Drilled out cement 8570-8571' and drilled on retainer, then slid to 8583'. Drilled cement 8583-8601'.

December 11, 1960

Shot 4 - 1/2" standard casing jet holes/ft at 8594'. Tagged bottom and pulled up to 8580'. Set RTTS packer and pressure tested blank interval 8594-8566'. Held 3200 psi for 25 min. Pulled up to 8545', set RTTS and pressure tested blank interval 8530-8566'. Did not hold pressure. Pressured to 1250 psi and bled back to 150 psi in 1 min. Fluid slowly circulated around blank interval 8530-8566'.

December 12 and 13, 1960

HCT #11 of interval 8616-8626'. Set packer at 8580' with tail to 8594'. Opened tool at 4:40 P.M. for 5 min initial flow then 1 hr ICIP. Opened to surface at 5:45 P.M. Had a light blow of air est 15-20 M/D rate declining to almost dead in 1 hr. Rigged up and started swabbing at 7:15 P.M. Made 8 runs with swab till midnight. Rec approx 2 bbl black sulphurous water with a scum of oil. Fl 8400'. Made six runs till 5:00 A.M., 12-13-60, and rec 2 bbl same fluid as above with fl at 8300'. Equalized tool at 5:25 A.M., 12-13-60. Fluid dropped 3' in annulus. Rigged up and continued swabbing and rec additional 1 bbl black oily sulphurous water. Took 3 hr FCIP 8:45-11:45. Rec 690' in 2-1/2" tubing, top 120' salty water with approx 10% black light gravity oil, remaining 570' gassy sulphurous odor salty water with a scum of oil.

Pressures	IH	IP	IF	FF	FP	FH
Bottom	3690	508	255	15	350	3690

Welllex perforated interval 8616-8626' with 4 - 1/2" dynajet holes/ft.

December 14, 1960

Ran straddle packers, set at 8607' and 8579'. Pumped in 200 gal breakdown acid. Squeezed acid away to perforations 8616-8626'. Rigged up swabbing unit and made 20 swab runs. Fluid swabbed down from 500' to 8607' on 17th run, swabbed from 8607' runs #18, #19, #20. Recovered total of 76 bbls fluid, last 4 runs were clear gassy acid water w/15-20% green oil sulfurous oil. On 21st run, line spooling shive broke. Repaired shive. Well made 700 M/D initially, declining to 10 M/D at end of four hours.

December 15, 1960

Test of interval 8616-8626' continued. With well making 210 M/D and no fluid made dummy swab run with sinker bar and re-spooled line. Ran swab, found fluid at 2000', picked up 800' of high gravity gassy watery oil. Well came in flowing, turned to trap to clean up at est 60-80 M/D with 100 psi sfc pressure, well headed between 20 M/D to 160 M/D for 1 hr 45 min, then died. Rec oil at 4.5 B/hr rate. Dowell acidized intervals in 7-5/8" csg 8616-8626'. Squeezed 2000 gallons jell x 100 - w/1200# psi to 1600#psi. Started acidizing at 2:37 P.M. Completed at 5:50 P.M. Pressure bled off from 1300 psi at 5:50 P.M., on vacuum at 6:11 P.M. Used 5 1/2 bbls water to flush with.

December 16, 1960

Welllex shot 4 - 1/2" holes per ft w/Dyng shots 8480-8490', 8458-8474', 8446-8452', 8438-8442'. Set pkr in 7-5/8" casing at 8580'. Ran Baker retrievable bridge plug on 2-1/2" tubing to 1674'.

December 17, 1960

Pressure tested BOPE to 2500 psi. Held OK. Retrieved Baker retrievable bridge plug at 1674'.

December 18, 1960

Landed 2-1/2" tubing at 8580' in Baker Model D production packer.

Tubing detail:

Bottom	2.0'	Baker seal nipple and locator sub.
Next 10 jts	306.44'	2-1/2" EUE 6.5# N-80 externally plastic coated tbg.
Next	8.68'	Baker Model K packer
Next	.88'	Baker L. H. safety joint
Next	1.10'	PSM
Next 261 jts	8,226.81'	2-1/2" EUE 6.5# N-80 tapered collar clearance new mils CF&I tubing
Next 3 jts	18.80'	2-1/2" EUE 6.5# N-80 tubing pups
Top	12.45'	KB to tubing head
	<u>8,576.36'</u>	

Ran 2-3/8" OD tubing to 8266' and pumped in Hydrazine treated water in 2-3/8" x 2-7/8" x 7-5/8" annulus. Stabbed into Baker Model K packer and landed with 5000# weight on packer. Type S nipple at 1516'.

2-3/8" tubing detail:

Bottom		5.50'	Baker seal nipple
Next	216 jts	6,744.03'	2-3/8" non-upset 4.5# N-80 tapered collar internally plastic coated new seals tubing
Next		1.10'	2.625" OD, 1.875" ID Otis Type "S" landing nipple
Next	48 jts	1,503.26'	2-3/8" tubing as above
Total		<u>8,253.89'</u>	
Landed		12.45'	Below K.B.

December 19, 1960

Tested Xmas tree to 4700 psi. Held OK

Crew released 8:00 A.M., 12-19-60.

COMPLETION REPORT - NEW WELL

STANDARD OIL COMPANY OF CALIFORNIA

FIELD: N. W. Lisbon

PROPERTY: Section 15

WELL NO: Arnold 21-15 (1)

Sec. 15 T. 30S R. 24E S.L. E. & M.

LOCATION: 765' S & 1840' E from NW corner
Sec. 15, T30S, R24E, S15M

LAND OFFICE: Salt Lake City, Utah

LEASE NO: U-09179

ELEVATION: 6307' K.B. ~~Surface~~

OKK is K.B. is 12.4' above ground.

DATE: January 16, 1961

By C. V. CHAFFERTON 1/16/61
Supt. Manager, Producing Department

DRILLED BY: Calvert Drilling Company

DATE COMMENCED DRILLING: September 6, 1960

DATE COMPLETED DRILLING: December 19, 1960

DATE OF INITIAL PRODUCTION: Not yet available

PRODUCTION:	Daily average, 1st _____ days	Gravity _____ ° API	Pumping _____
	Oil _____ Bbls.	T. P. _____ PSI	Flowing _____
	Water _____ Bbls.	C. P. _____ PSI	Gas Lift _____
	Gas _____ Mcf.	Bean _____ /64"	

S U M M A R Y

T.D.: 9050'

EFFECTIVE DEPTH: 8650'

CASING: 13-3/8" cmtd 1205'
7-5/8" cmtd 9046' Cmt drld out to
9007' Cast Iron Bridge Plug
at 8650' Model "D" Production
Packer 8580'.

PERFORATIONS: Circular notches at 8916',
8952' & 8968'
4 jets/ft - 8616-8626*, 8912-8920,
8941-8951, 8958-8966'.
4 - 1/2" jets/ft - 8403-8405, 8427-8429,
8438-8442, 8446-8452, 8458-8474,
8480-8490', 8510-8530, 8561-8566,
8594-8598**, 8616-8626'.
* Reperf'd with 4 - 1/2" jets/ft.
** Perfs 8594-8598' sealed with cement.

LOGS RUN:

Schlumberger IES	1205-4350'
Microlog	1205-4350'
Schlumberger Directional Survey	1205-4350'
Schlumberger -	
Gamma Ray-Neutron-Laterlog	1205-8508'
Gamma Ray-Sonic	1205-8508'
Section Gauge	4000-8509'
Laterlog Gamma Ray Neutron	8508-9050'
Sonic-Gamma Ray	8507-9050'
Continuous Dipmeter	2600-9050'
Lane Wells Gamma-Ray Collar	
Multispaced Neutron	7900-8990'
Lane Wells PFC Log	8200-9007'

MARKERS: Top Hermosa - 2490'
Top Paradox "A" - 4000'
Top Salt - 4350'
Top Mississippian - 8098'
Top Ouray - 8605'
Top McCracken - 8875'
Base McCracken - 8974'

DST # 1 - 8129-8225'
2 - 8222-8370'
3 - 8370-8472'
4 - 8826-8936'
5 - 8912-8966'
6 - 8616-8626'
7 - 8510-8598'
8 - 8403-8405' & 8427-8429'
9 - 8403-8405' & 8427-8429'
10 - 8594-8598'
11 - 8616-8626'

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

Cemented 21" conductor pipe at 28' with 35 sacks cement.

Calvert Drilling Rig #28 National 80B powered by three caterpillar G 397 gas engines. Main Pump Gardner Denver GXP (7-3/4" x 16). Standby pump Gardner Denver FXK (7-1/4" x 14). Both compounded to drawworks engines. 131' L. C. Moore derrick.

Well spudded 2:00 P.M. September 6, 1960. Drilled 7-7/8" hole 0' - 79'.

Drilled 7-7/8" hole 79' - 1225', September 7, 8 and 9, 1960.

September 10, 1960

Opened 7-7/8" hole to 12-1/4" 0' - 1215'.

Opened 12-1/4" hole to 17-3/8" 0' - 15'.

September 11, 12 and 13, 1960

Opened 12-1/4" hole to 17-3/8" hole 15' - 1205'.

Left 17-3/8" hole opener in hole.

September 14, 1960

Recovered 17-3/8" hole opener fish.

HOWCO cemented 1223' of 13-3/8", 54.5#, J-55 casing at 1205' with 800 sacks common cement all treated with 2% CaCl₂. Cnt. mixed 117# slurry Used one top rubber plug. Displaced plug with 184 c.f. water. Bumped plug w/1000# pressure, OK. Full circulation. No cement returns to surface. Cement in place at 8:15 A.M. Casing equipped w/ Baker Guide and Baker float. Centralizer 5' above shoe 5' above float. Scratcher on two bottom joints (Treated joints w/Baker Lock - shoe - float and 2 joints above) Shoe jt 42.44 - bottom csg landed at 1205'. Float at 1163' - K.B.

Casing Detail:

All 31 jts., 1222.36', 13-3/8", 54.5#, J-55, 8rnd, short, range 3, new J&L smls casing.

September 15, 1960

Installing BOPE.

September 16, 1960

Tested complete shut off to 1400# for 10 minutes. OK. Tested rams on 4-1/2" D.P. to 1400# for 10 min. OK. Tested G.K. Bag on 4-1/2" DP. to 1500# for 10 min. OK. Tested Kelly Cock. OK.

Drilled 9-7/8" hole 1205' - 1317'.

September 17 - September 26, 1960

Drilled 9-7/8" hole 1317' - 4272'.

September 27, 1960.

Drilled 9-7/8" hole 4272' - 4350'. Last two feet drilled 1 min/ft, should be Top Salt. Ran Schlumberger IES from 4350' to 1205'. (Shoe 13-3/8" casing). Top Hermosa 2490', Top Paradox "A" 4000', Top Salt 4350'. Ran Microlog 4350' to 1205', Ran Schlumberger Directional Survey 4350' - 1205'.

Dumped low solids fresh mud and cleaned pits. Filled pits and storage tank w/salt water.

September 28, 1960

Changed over to Salt Base Mud.

Drilled 9-7/8" hole 4350' - 4692'.

September 29 - October 1, 1960

Drilled 9-7/8" hole 4692' - 6183'.

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

October 2, 1960

Drilled 9-7/8" hole 6183' - 6590'.

Started up to make connection at 9:20 A.M. Stuck pipe on bit 20' off bottom at 6570'. Circulate free. Working pipe no success. Spotted 36 bbls Diesel around D.C.'s.

October 3, 1960

Working stuck D.P. TD 6590'. Stuck bit at 6570'. Fishin hole 2 - 7" x 58' and 12 - 8" x 334'. Total DC's 392'. Remainder - 4-1/2" F.H. D.P. Ran Dialog free pt OK to 6540'. Pld - ran string shot to 6490'. No good. Reran string shot #2 - back off DCs at 6490'. Left 3 DCs above bit. Ran in with Cortez Fishing Tool. Screwed into DCs at 6490', jarring and bumping down on fish - no success. Could not get circulation through bit.

October 4, 1960

Recovered fish.

Drilled 9-7/8" hole 6590' - 6596'.

October 5 - October 7, 1960

Drilled 9-7/8" hole 6596' - 7022'.

October 8, 1960

Drilled 9-7/8" hole 7022' - 7116'.

Pipe stuck while taking survey at 7116'.

Ran McCullough Magnector. Found free point at 7075' and backed off at 7075' with string shot.

Ran in with jars, bumper sub and screwed in to fish.

October 9, 1960

Jarred on fish three hours and came loose.

Recovered all of fish.

Drilled 9-7/8" hole 7116' - 7176'.

October 10 - October 18, 1960

Drilled 9-7/8" hole 7176' - 8223'.

October 19, 1960

DST #1 8223-8129'. Ran Halliburton testing tools on 4-1/2" F.H. D.P. and 167 of 7" and 8" D.C. Set packers at 8129' and 8124'. Used 1000' of water cushion. Opened tool at 9:35 A.M., had weak blow steadily increasing to strong. Shut in for 45 min ISIP, gas to surface at 9:55 A.M. Opened to trap at 10:25 A.M., trap all plugged with scale, water and iron sulphide. Worked on trap to 11:15 A.M., turned gas to trap at 1,435 M/D rate. Water cushion and mud to surface at 10:33. Gauged gas thru trap with 1400 psi surface pressure and 120-600 psi back pressure on trap at 215 M/D to 2,190 M/D rates - Fluid line (1") to tank froze, fluid evaporated out of tank. Took two gas samples and one fluid sample for analysis. Took 1 hour flow, 1 hour FSIP, pulled packers at 1:15 P.M. Est. 185 B/D condensate, 1181 GOR. Rec. 1000' of sulphurous mddy water.

Pressures	Hydro	ISIP	Flow	FSIP
Top	4218	2823	1162-2332	2798
Bottom	4991	2870	1377-2378	2842

October 20 - October 22, 1960

Drilled 9-7/8" hole 8223' - 8370'.

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

October 23, 1960

DST #2 8222-8370'. Ran Halliburton tester on 167' of 7" and 8" D. C. and 4-1/2" F.H. D.P. Used 1000' fresh water cushion. Set packers at 8217 and 8222'. Opened tool for 2 min at 8:28 A.M. Closed in and took 30 min ISIP. Gas to surface at 8:35 A.M. Opened tool at 8:58 A.M., fluid to surface at 9:10 A.M. Gas gauged thru trap at 1.341 MM/D rate at 300 psi trap pressure to 3.298 MM/D rate at 650 psi trap pressure. Took two samples of gas for Pet. Tech. Only fluid was 7 bbl of very fluffy H₂S cut mud w/about 10-25% condensate. Shut tool in at 10:35 A.M. for FSIP. Pulled tools loose at 11:05 A.M. and backscuttled rise, an est 3 bbl of flack fluffy mud and +25% condensate. Unable to gauge rise accurately because lost returns. Pulled six stands and started mixing mud and LCM.

Pressures	IH	ICIP	IF	FF	FCIP	FH
Top	5039	2858	2299	2771	2860	5028
Bottom	5126	2911	2557	2821	2886	5100

October 24, 1960

Finished pulling DST #2. Rec 167' filled w/black condensate. Drilled 9-7/8" 8370' - 8423'.

October 25, 1960

Drilled 9-7/8" hole 8423' - 8472'.

October 26, 1960

DST #3 8370-8472'. Ran Halliburton testing tools on 167' D.C. (8") and 4-1/2" F.H. D.P. Used 1000' fresh water cushion. Set packers at 8365 and 8370', tail to 8472'. Opened tool at 8:03 A.M. for 2 min initial flow. Next 30 min ICIP, next 4 hr 20 min Flow (incl 65 min SI at surface) and 45 min FCIP. Closed at 8:05 A.M. to take 30 min ISIP. Gas to surface at 8:10 A.M. while tool shut in. Opened tool at 8:35, fluid cushion to surface in 4 minutes, let flow clean up, turned to separator at 8:55 A.M. Rate in 45 minutes was 3.150 MM/D gas with 3/4" surface bean and 1200 psi surface pressure, 650 psi separator pressure. Trap broke down, shut well in at surface for 1 hr 5 min to repair dump valve on oil leg. Opened up to separator at 10:45 A.M. at average 2.638 MM/D gas rate, 1/2" surface bean, 1400 psi sfc pressure, 655 separator pressure, 82°F separator temperature. 61.3° API condensate to sfc. w/gas. Condensate is lt. yellow green w/ H₂S odor. Well gauged at 34.4 bbls first hour w/ 2.638 MM/D, making 3500 GOR. Results of second hour test avg rate 3.839 MM/D with 1/2" sfc bean, 1400 psi sfc pressure, 660 psi trap pressure, 82° Trap Temp, 23.3 bbls 61.3° API oil. GOR is avg 6700, max 7000 scf/bbl. Closed tool in at 12:50 P.M. and took 45 min FSIP. Pulled tools loose at 1:35 P.M. and bled off pressure, pulled 25 stands and backscuttled out 12.5 bbls oil, slightly mud cut on bottom. Pulled out and rec 197' below backscuttle tool, all heavily mud cut condensate.

Pressures	IH	ISIP	FLOW PERIOD	FSIP
Top	4931	2877	1876-2680	2881
Middle	5045	2935	- 2726	2912
Bottom	5045	2942	2117-2748	2930

October 27, 1960

Drilled 9-7/8" hole 8476' - 8523'.
Lost circulation at 8523'.

October 28, 1960

Conditioned and regained circulation.

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

October 29, 1960

Ran Schlumberger logs as follows -

Gamma Ray-Neutron-Laterlog 8508-1205°
 Gamma Ray-Sonic 8508-1205°
 Section Gauge 8509-4000°

Top Mississippian 8098°.

Drilled 9-7/8" hole 8523' - 8530'.

October 30 - November 3, 1960

Drilled 9-7/8" hole 8530' - 8760'

November 4, 5, and 6, 1960

Took Core #1 - 8760 - 8820'. Recovered 60'. (9-13/16" hole)

- 8760-8772° Lt brn to grey dol with inclusions green dol hairline fracs thruout. NOSCF very dense.
- 8772-8780° Dense lt gray-green dol with hairline fracs Poor P.P.P. NOSCF.
- 8780-8783° Lt grn shaley dol w/slickensides, calcite veinlets and hairline fracs thruout.
- 8783-8787° Buff dol dense faint pet odor. Looks tite Few hairline fracs.
- 8787-8793° Bluish grn soy dol matrix w inclusions brecciated silicious brn dol 1/2" - 3" dia occ minor slickensides Dull mottled brn fluor (dead oil stain) occ vugs to 1/2" filled with calcite also minor hairline fracs thruout.
- 8793-8796° Gry gray shaley dol with stks fine-med grained well rounded quartz sand Few minor slickensides dull brn gold fluor.
- 8796-8810° Same as 8787-8793°.
- 8810-8815° Dk gy shaley and slightly sdy dol with stk dk gray shale hairline fracs NOSCF.
- 8815-8819° Grn (glaucanitic?) dense shaley dol w occ slickensides and inclusions of brn cherty dol NOSCF
- 8819-8820° Brn cherty dolomitic shale.

November 7, 8, 9, 1960

Took Core #2 - 8820-8878'. Recovered 58'. (9-13/16" hole)

- 8820-8825° Blue-grey to grey, very fine xline. Dense dolomite. No visible porosity, flouresence or stain.
- 8825-8834° Grey to grey brown fine crystalline dolomite. Fair P.P. Porosity, numerous hairline vert to near vert fracs bleeding oil. Milky white flour, fair pet odor, slight visible stain becomes dense at 8829-1/2 - 8830°. Minor pods of brn marlstone at 8830°. Minor calcite veins on fracs.
- 8834-8835° Dense, lesser amount of flour & porosity.
- 8835-8838° Blue to blue grey very fine xline dense slightly shaley dolomite. Pods of brn shale or marlstone very minor P.P. flour and porosity.
- 8838-8841° Same as at 8825-8835°.
- 8841-8845° Dense blue-blue grey dolomite, very rare P.P. flour, porosity looks very tite, has abundant pods and bands of dark grey to brown shaley marlstone Few minor slicks on frac.
- 8845-8847° Dense fine xline grey to grey brown dolomite. Poor to fair P.P. porosity Milky white flour on P.P. and numerous bleeding fracs.
- 8847-8850° Same as at 8841-8845°.
- 8850-8855° Dense fine to medium crystalline brown-gren dolomite with fair to good P.P. porosity, numerous hairline fracs vert to near vert bleeding oil. Good milky white flour, good pet odor.
- 8855-8870° Blue to blue grey very dense microxline to fine xline dolomite. Numerous pods of blue & brn marlstone & shale. Large reworked pieces of very f. xline dolomite in f xline sucrosic matrix. Noscf.

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

November 7, 8, 9, 1960 (cont.)

- 8870-8871° Same as at 8850-8855°.
 8871-8872° Dense as 8855-8870, minor flour.
 8872-8873° Same as at 8850-8855°.
 8873-8876° Very fine xline sucrosic dense blue grey dolomite w/within 1/2" to 2" pods and bands of dense green and brown marlstone Minor slickensides, looks reworked.
 8876-8878° Very fine xline, sucrosic blue grey dense dolomite.

November 10, 11, 1960

Took Core #3 - 8878-8936°. Recovered 58'. (9-13/16" hole)

- 8878-8880° Dolomite, slightly vuggy buff, with sandy stks to 1/2" Faint odor on fresh surface slight mottled bright blue flour w occ pop of oil bleeding from core.
 8880-8885° Dolomite, grn, with lt gy sands stks and inclusions NOSCF.
 8885-8895° Dolomite, green, sandy, becoming sandier toward botton. NOSCF.
 8895-8898° Lt gy to lt brn oil stained dense dolomitic sandstone. Good pet odor on fresh break bleeding lt grn sweet oil, look tight. Bright blue flour very fine to fine grained subrounded to subangular. Top McCracken at 8895°.
 8898-8904° Grn (Glaucanitic) sandy dolomite with stks dolomitic sand and occ dk gry marlstone stks NOSCF.
 8904-8909° Grn sandy dolomite with subrounded to angular 1/2" to 1" inclusions and pods. Pink and brn sandy dolomite looks tite NOSCF.
 8909-8916° Gray dolomitic sandst fine to crs grained well rounded sand NOSCF Succrosic texture.
 8916-8930° Lt gy to lt brn dolomitic sand st w numerous stylolites and laminae of dk gy mdstone Good pet odor. Bright bluish flour bleeding lt green oil and gas looks tight occ inclusions of grn glaucanitic material in top 4" 1/32 to 1/16" dia excellent vert fracs from 8922-8926°.
 8930-8936° Gy dolomitic sandst with numerous random hairline fracs. Bottom 2° broken when extracting from core bbl NOSCF looks tight.

DST #4 8826-8936°. Set dual ESA 8-1/2" OD packers at 8821° and 8826°. Used 3/4" BH choke Bowen ITCO jars. Opened tool at 10:10 AM for 5 min initial flow, 1 hr ICIP, 1 hr flow and 1 Hr 5 min FCIP. Had a very light blow of air for 1 hr. No gas to surface. Rec 80° oil and gas cut mud Est 5-10% light oil ditch sample tested 310,000 ppm 10.1#/gal and sample at tool tested 297,000 ppm and 9.6#/gal.

Pressures	IH	ICIP	IF	FF	FCIP	FR	
Top Inside	4835	1692 *	48	64	630 *	4822	* Still building up.
Middle Inside	4929	1732 *	116	134	799 *	4886	
Bottom/Outside	4854	1715 *	90	105	662 *	4852	

November 12 and 13, 1960

Took Core #4 - 8936-8994°. Recovered 58'. (9-13/16" hole).

- 8936-8940° Lt to dk gy very fine grained succrosic ortho-quartzite. Looks tite. NOSCF.
 8940-8970° Lt brn mottled oil stained ortho-quartzite fine grained succrosic texture. Good oil odor. Bleeding oil and gas. Mottled lt blue flour. Numerous hairline fracs and major fracs 8947-8950, 8951-8953, 8954-8956° Perm & porosity varies with oil stain Numerous 1/2" - 1" tight stks scattered throughout interval with 1° tight sand at 8958-8959°.
 8970-8994° Lt gy fine grained succrosic ortho-quartzite with inclusions of dk gy qtzite grading to dk gy at botton. NOSCF. Fracs 8980-8983, 8985-8990. Trace pyrite toward botton.

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

November 14 and 15, 1960

Took Core #5 - 8994-9050'. Recovered 56'. (9-13/16" Hole).

8994-9000' Dark grey to greenish grey fine to med xline dolomite. No visible porosity, stain or flour. Abundant olivine, horn blend, and pyrite. Rare calcopyrite, very dense, possible slightly metamorphosed.

9000-9002' Black to grey black dolomitic shale, very dense, platy. Abundant micaceous material, schistocis appearance.

9002-9050' Dark grey, grey black, and greenish grey fine to med xline dolomite with 1/4" to 3" stringers of black micaceous shale. Abundant olivine, horn blend, pyrites. All very dense, no visible porosity no flour.

Ran Schlumberger logs as follows:

Laterolog Gamma Ray-Neutron and recorded 8508-9051'.

Sonic-Gamma Ray log and recorded 9051-8507'.

Continuous dipmeter and recorded 9051-2600'.

Base McCracken 8974' (-2664'), Top McCracken 8875' (-2568'), Top Ouray 8605' (-2298').

November 16, 1960

Cemented 9077' 7-5/8", 33-7#, N-80 casing at 9046', equipped w/Baker Guide and Baker Float 81' above guide shoe. Centralizers 3' above shoe Collar above - and 3' above float collar. Then on collars joints 3, 4, 5, 10, 11, 13, 14, 16, 18, 20, 22, 24. Scratcher 6' on joints 1, 2, 3, 4, 5, 11, 14, 15, 16, 18, 20, 22, 24. Cir and added 30 gal Hydrizene to 360 bbls mud. BJ. cmdt csg @ 9046' w/1100 sax 50-50 pozmix followed w/200 sax neat latex. Mixing time 27 min, dropped two top rubber plugs. Displaced w/2404 cu. ft. mud. 159 cu. ft. over displacement. Displacement pressure 400-1000# psi. Bumped plugs w/1600#. Held 5 min. Bled off. Float wouldn't hold. Pressured up to 1000#. Closed in. Standing cemented. Cement in place at 8:07 P.M.

Casing Detail:

All 312 jts, 9077-35', 7-5/8", 33-7#, N-80, 8rnd, range 3, LT&C new J&L smls. casing.

November 17, 1960

Landed 7-5/8" casing in as cemented position.

Re-installed BOPE.

November 18, 1960

Drilled out cement to 9007' and displaced mud with saturated salt water.

November 19, 1960

Ran Lane Wells Gamma Ray-Collar log and dual spaced neutron log. Recorded from 8990 to 7900'.

Ran Dowell Abrasijet tool and cut circular notch at 8962'.

November 20, 1960

Cut circular notch at 8945' and 8916'.

Cleaned out sand 8987-9007'.

Displaced salt water with #5 burner fuel.

November 21, 1960

Ran 201 jts 2-1/2" tubing open end Total 6991. Hooked up Dowell fracing equipment. Tried to breakdown sand abrasive notches cut in 7-5/8 casing @ 8962-8945-8916 w/5200# psi. No success. Dismantled Dowell equipment head. Pulled tubing.

November 22, 1960

Ran Lane Wells PFC log. Check bottom @ 9007' OK w/CO measurements. Checked collars w/casing tally. Checked and found notches in 7-5/8" casing @ 8968 and 8952. Could not pick up notch @ 8916'. Above notches correlated w/Schlumberger log. Corrected Lane Wells log #2 w/Schlumberger log and collars. Perforated casing w/super csg jets.

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

November 22, 1960 (cont.)

Four jets per foot 8966-8958', 8951-8941', 8920-8912'. Ran Dowell Implosion bombs on Lane Wells line. Imploded capsule at notch 8968' and notch at 8952'. Closed complete shut off. Formation broke down at 3400# psi.

Hung 6991' 2-1/2" open end tubing in Dowell frac head. Tested lines to 5200 psi. Sand-oil squeezed McCracken zone down 2-1/2" x 7-5/8" annulus with 22,000# 20-40 and 8,000# 10-20 Ottawa sand. Sand screened out after 184 bbls flush water in leaving an estimated 11,000# sand in formation and 19,000# in casing. Removed frac head and pulled tubing.

November 23, 1960

Cleaned out frac sand from 8763 to 9007'.

November 24, 1960

DST #5 of perfs 8912-8966'. Ran in w/HOWCO tester. Total tools 51.60 - 32.49 to packers on 2-1/2" tubing. Felt for bottom @ 9007' - OK. Picked up and set pkr @ 8998'. Tail @ 8915'. Took 3/4 hr ISI. 6:00-6:45 AM opened tool. Light blow 6:45 AM - 12:00 Noon, 5 hrs 15 min. Hi-Z Ran swab to 8500' - 5 times. No fluid swabbed. Line looked like had been in fluid approximately 300'. Swab rubber would wear out. Small amount tar and possible lost cir material on swab rubbers. Layed down swab - picked up on set tester. Went down tagged bottom @ 9007'. Pld up, reset tester @ 8990'. Open tool for 30 min Slight blow as before tool open. OK. Closed in for 3 hr final shut in. Pld loose @ 7:00 P.M. Pld and rec 630' salt water. 110' #5 burner fuel.

Pressures	IH	ICIP	IF	FF	FCIP	FH
Top Inside	4522	3252	26	400	3030	4515
Middle Inside	4495	3227	51	397	3006	4488
Bottom Outside	4603	3290	111	451	3075	4568

November 25, 1960

Ran 6-1/2" OD feeler and collar locator on Mc Cullough line. Checked collar w/Lane Wells run OK @ 8802, 8846, 8567, 8642 and 8606'. Ran Baker cast iron bridge plug and set in csg @ 8650'. Ran and jet shot 4 - 1/2" holes per ft w/super casing jet 8616-8626'. Load out McCullough. Run HOWCO RTTS tool on 3-1/2" DP. Tagged bridge plug OK at 8650'. Pulled up and set pkr in 7-5/8" csg @ 8580'. Dowell acidized perfs 8616-8626 w/200 gal breakdown acid followed w/2000 gal retarded acid. Pressure broke back from 4300# to 3700# then started pumping @ max rate. Pressure broke from 4400# to 3300# at end of job. Completed salt wash displacement. Pressure dropped from 3300# to 800# then pressure dropped to 0#. Well went on vacuum.

November 26 and 27, 1960

DST #6 of perforated int. 8616-8626'. Set packer at 8565' with tail to 8590'. No water cushion. Took 4 min initial flow, 50 min I CIP, next 3 hrs 8 min (to 12:45 P.M. 11-26-60) op en flow test; next 5 hrs 45 min swabbing (to 6:30 P.M. 11-26-60) Next 7-1/2 hrs flowing (to 2:00 A.M. 11-27-60) Next 2-3/4 hrs shut in at surface (to 4:45 A.M. 11-27-60) Next 1-3/4 hrs flowing (to 6:30 A.M. 11-27-60) Next 3 hrs shut in at surface (to 9:30 A.M. 11-27-60) Last 3 hrs 35 min turned to trap (to 1:05 P.M. 11-27-60) Took 2 hr 5 min FCIP. Opened tool for flow test at 10:37 A.M. Had an est 25-35 M/D blow of air decreasing to less than 1/2 M/D rate at end of 1 hr. Gas and acid gas to surface after tool open 2 hrs 23 min (1:03 P.M.). Rigged up swabbing unit 12:45 P.M. Fluid level 2000'. Swabbed salt water till 1:03 P.M. then started getting acid gas grading to acid gas, gas and summ oil at 2:00 P.M. Continued swabbing till 5:30 P.M.

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

November 26 and 27, 1960 (cont.)

making gas with salt water and black emulsion decreasing steadily from 95% to 60% and oil (48° API gravity) increasing from 5% to 40%. Produced by swabbing and intermittent flowing 60 bbl of fluid from 12:45 P.M. to 5:30 P.M. Continued flowing well till 2:00 A.M. (11-27-60) Produced 119 bbl of fluid with salt water and emulsion cut decreasing from 60% to 20%. Shut in well at 2:00 A.M. till 4:45 due to atmospheric conditions. Well head pressures increased from 365 psi to 785 psi. Opened well again to flow at 4:45 A.M. and flowed till 6:30 A.M. when atmospheric conditions endangered rig safety. Produced 35 bbl 5% water and emulsion in 1 hr 45 min at 480 B/D rate thru 16/64 bean at well head pressures of from 770 to 500 psi. Shut in at surface 6:30 A.M. till 9:45 A.M. Well head pressure rose from 500 psi to 800 psi. Turned to trap last 3 hrs 20 min of test. Produced at an average rate of 552 B/D 48° API gravity oil 710 M/D gas thru 3/4" bean with a trap pressure of from 300 psi to 265 psi and well head pressure from 690 psi to 300 psi. Took 2 hr 5 min FCIP from 1:05 P.M. to 3:10 P.M.

Pressures	IH	ICIP	IF	FF	FCIP	FH
Top Inside	4308	3105	2225	1144*	Clock ran down	
Middle Outside	4393	3186	2467	1565**	"	"
Bottom Outside	4328	3134	2267	2233***	"	"

* Last pressure after tool set 15-1/2 hours.

** Last pressure after tool set 16-1/2 hours.

*** Last pressure after tool set 17-1/2 hours.

November 28, 1960

Rigged and ran HOWCO Bridge plug and collar finder stopped @ 3435'. Could not get below this point. Pulled out. Found that HOWCO had lost pieces of rubber from tester packer. Ran open end 2-1/2" tubing to top cast iron bridge plug at 8650'. Circ hole clean. Ran HOWCO cast iron plug on McCullough wire line and set at 8601'. Ran McCullough super casing jets and perf'd intervals 8598-8594', 8566-8561', and 8530-8510' with 4 - 1/2" jets per foot. Used collar log, shot from collars.

November 29, 1960

Ran Halliburton RTIS packer on 2-1/2" tubing, tagged BP at 8605', pulled up to 8490'. Dowell spotted 500 gallons BDA and 1500 gallons JEL-X-100 retarded acid in tubing on bottom. Set Halliburton packer at 8490', pressured annulus to 1000 psi. Staged in 15 bbls flush at 2000 psi and 4-1/2 RPM, shut down 5 min. Pressure dropped 900 psi to 400 psi, staged in 20 bbl flush at 5 BPM and 1600 psi, shut down 5 min (Ist. S.I. 600), staged in last 25 bbl flush at 5 BPM and 1200 psi, shut down pressure 200 psi to 0 in 2 min. Acid in place at 6:05 A.M. Tore out Dowell, rigged up to swab. DST #7 interval 8510-8598'. Swabbed well with F.L. at 2000', made seven runs with fluid rising to 1000'. Rec total of 31 bbls acid and brine water, blowing acid gas. Shut in and rigged up to trap. At 10:45 well turned to trap, allowed well to clean up and partially stabilize rate, at 12:00 noon started 2-1/2 hr trap test. Gas rate increased from 1548 M/D at noon to 1703 M/D at 2:30 P.M. Oil rate averaged 700 B/D rate 2-1/2 hrs, avg GOR for 2-1/2 hrs 2360 scf/bbl. Cut 30% at flowline, est 5-10% at tank, gravity 50° API at 60°F, cloud point 38°F, good lube oil odor. Took 10 gallons oil sample and gas sample for analysis.

November 30, 1960

Lost 700 bbl water in perfs interval 8510-8598 before setting B.P. at 8500'. McCullough set Halliburton Model DC bridge plug at 8500'. McCullough attempted to perf, but guns would not fire. Ran 2-1/2" tubing, circulated oil out of top of hole (+700bbl). Started laying down tubing. Wellex rigged up and shot 4 - 1/2" jet holes, intervals 8403-8405 and 8427-8429'. Rigged down Wellex, continued laying down tubing.

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

December 1, 1960

Ran DST #8 interval 8403-8405' and 8427-8429'. Ran Halliburton testing tools on dry 3-1/2" DP. Set packers at 8366'. Took 14 min IF, 49 min ISIP, opened tool to surface at 8:45 A.M., had weak blow steadily increasing to fair blow, gas to surface at 9:55 A.M. TSTM. Blow died at 11:00 A.M., shut tool in at 11:45 A.M. for 1 hr 40 min FSIP.

Reversed out rise, recovered approximately 6100' all dark, gassy, sulfurous water w/scum oil. Res. .086 ohmmeters, wt 9.1#/gal. Charts indicate tool and perforations partially

Pressures	IH	ICIP	IF	FF	FCIP	FH	plugged.
Top Inside	3714	2825	31	3020	3028	3695	
Middle Inside	3715	2824	36	3026	3033	3705	
Bottom Outside	3732	2814	46	3042	3042	3725	

December 2, 1960

Ran Halliburton RTTS on 3-1/2" IF DP and set at 8490'. Pressure tested BP and DP to 3000 psi, held OK. Pulled RTTS to 8370' and set. Acidized perfs 8403-8405' and 8427-8429' w/500 gallons BDA and 1500 gallons retarded acid as follows: Spotted acid to bottom of pkr, closed bag, pressured annulus to 1000 psi, held OK. Pumped in 13 bbls at 2500 psi at 6BPM, shut down 6 min well on vacuum, pumped in 20 bbls at 5 BPM and 2000 psi, shut down well on vacuum, pumped in 20 bbls at 6.7 BPM and 1800 psi, shut down well on vacuum. Let acid soak.

December 3, 1960

Testing on DST #9. With RTTS pkr at 8370', tested intervals 8403-8405 and 8427-8429'. At midnight well flowing thru 1/4" bean with 1600 psi sfc pressure, flowed well at reduced rate until 7:30 A.M. Average rate 991 M/D and 218 B/D 53" API oil for average GOR of 4546 scf/bbl. Opened well up at 8:30 A.M. at 3663 M/D rate and 480 B/D rate. Well averaged 527 B/D, 3741 M/D gas for average GOR of 7000, GOR dropped to 4870 scf/bbl last hour and well oil rate was increasing. Average cut 10%. Pulled pkr loose and backscuttled out oil to tank and gas to burn pit.

December 4, 1960

Drilled on cast iron bridge plug at 8500'.

December 5, 1960

Finish drilling up bridge plug at 8500'.

December 6, 1960

HCT #10 of interval 8594-8598 to determine effectiveness of cement bond 8566-8594'. Set packer at 8566' with hole taking fluid. Reset pkr at 8566, hole kept taking fluid. Reset pkr twice at 8588', hole kept taking fluid. Attempted to close pipe rams w/no success - frozen up, tried manual controls, still frozen up. Pulled pkr up and reset 7:00 A.M. had a light blow of air for 15 min, then dead. Shut in at surface at 8:00 A.M. At 1:30 P.M. took initial shut in, filled hole and closed pipe rams, and left test tool shut in while thawing out rig.

December 7, 1960

Thawing out rig.

December 8, 1960

With packer set at 8241' closed rams, pressured annulus to 1000 psi. Held OK. Pulled loose at 8:00 A.M., tagged BP @ 8601', pulled up and set pck at 8577'. Hole took fluid at 3/4 bbl/min rate when perfs 8518-8598 were exposed. Set tool 8:45, took 15 min ICIP, opened tool 9:00 A.M., alternately had medium blow est 25-30 M/D air then went on vacuum. Made two swab runs found fluid at sfc. 10:45 had fluid to sfc flowing at est 0.1 BPM rate. Closed bag, pumped in 1 bbl and fluid rate at sfc increased to 1 BPM rate, indicating that communication exists between perforated int. 8561-66 and 8594-98.

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

December 8, 1960 (cont.)

Pressures	IH	ICIP	IF	FF	FCIP	FH
Top Inside	3738	2776	3695	3738	-	3738
Bottom Outside	3530	2710	Clock stopped			

Checked collars at 8285, 8327, 8370+, 8406-1/2, 8450-1/2, 8488, 8524-1/2, 8568 and top of bridge plug at 8601'. Set HOWCO cast iron retainer at 8572'.

December 9, 1960

Recemented 7-5/8" casing thru 16-1/2" holes 8594-98'. Tested surface lines to 5000 psi. Stabbed into retainer at 8572'. Broke formation down 7 BPM @ 1100 psi. Pumped in 50 sax Latex Class "A" cement mixed with .02% HR-4 retarder, started mixing 11:08 A.M. finished mixing at 11:12 A.M. Displaced cement with 50-1/2 bbl water. Displaced last 5-1/2 bbl over 45 min period using hesitation method. Cement in place 12:09 P.M. 0 psi final pressure. Squeezed away 48 sacks cement below retainer. Reversed out 7-1/2 bbl cement leaving 4.3 bbl below retainer, or 18 sax Latex cement.

December 10, 1960

Drilled out cement 8570-8571 and drilled on retainer then slid to 8583. Drilled cement 8583-8601'.

Ran McCullough M-3 bullet gun. Could not get below 8597'. Attempted to shoot 4 - 1/2" bullet holes but gun failed to fire.

Ran new bit and cleaned out to top of bridge plug. No appreciable fluid loss.

December 11, 1960

Checked collars at 8285, 8327, 8370+, 8406-1/2+, 8450-1/2, 8488, 8524-1/2 and 8568'. Found bottom at 8596'. Shot 4 - 1/2" standard casing jet holes/ft at 8594'.

Tagged bottom and pulled up to 8580. Set RTTS packer and pressure tested blank interval 8594-8566'. Held 3200 psi for 25 min. Pulled up to 8545', set RTTS and pressure tested blank interval 8530-8566. Did not hold pressure. Pressured to 1250 psi and bled back to 150 psi in 1 min. Fluid slowly circulated around blank interval 8530-8566'.

December 12 13, 1960

RCT #11 of interval 8616-8626'. Set packer at 8580' with tail to 8594'. Opened tool at 4:40 P.M. for 5 min initial flow then 1 hr I CIP. Opened to surface at 5:45 P.M. Had a light blow of air est 15-20 M/D rate declining to almost dead in 1 hr. Dropped two swab sticks. Rigged up and started swabbing at 7:15 P.M. Made 8 runs with swab till midnight. Rec approx 2 bbl black sulphurous water with a scum oil. FL 8400'. Made six runs till 5:00 A.M. 12-13-60 and rec 2 bbl same fluid as above with FL at 8300'. Equalized tool at 5:25 A.M. 12-13-60 Fluid dropped 3" in annulus. Rigged up and continued swabbing. Rec 2 bbl black sulphurous water with a scum of oil. Equalized tool at 5:25 A.M. Had a light blow est at 2 M/D for next 30 min continued swabbing and rec additional 1 bbl black oily sulphurous water. Took 3 hr FCIP 8:45 - 11:45. Rec 690' in 2-1/2" tubing top 120' salty water with approx 10% black light gravity oil, remaining 570' gassy sulphurous odor salty water with a scum of oil.

Pressures	IH	ICIP	IF	FF	FCIP	FH
Top	3726	300	235	135	365	3726
Middle	3705	515	215	Clock ran out		
Bottom	3690	508	255	15	350	3690

Rigged up Wellex lubricator. Checked collars at 8285, 8327, 7370+, 8406-1/2, 8450-1/2, 8488, 8524-1/2, 8468, 8606 and 8642'. Located bottom at 8643-1/2. Perforated interval 8616-8626 with 4 - 1/2" dynajet holes/ft.

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

December 14, 1960

Ran in with HOWCO RTTS and HM straddle packers, tagged bottom, pulled up and set RTTS at 8607 and HM packer at 8579'. Pumped in 200 gal breakdown acid followed by 43 bbl water. Closed circulating ports and squeezed acid away to perforations 8616-8626'. Rigged up swabbing unit and made 20 swab runs. Fluid swabbed down from 500' to 8607' on 17th run, swabbed from 8607 runs #18, #19, #20. Recovered total of 76 bbls fluid, last 4 runs were clear gassy acid water w/15-20% green sli sulfurous oil. On 21st run, line spooling shive broke. Repaired shive, opened up well and bled off pressure from tubing. Well made 700 M/D initially, declining to 10 M/D at end of four hours.

December 15, 1960

Test of interval 8616-8626 continued. With well making +10 M/D and no fluid made dummy swab run with sinker bar and respooled line. Ran swab, found fluid at 2000', picked up 800' of high gravity gassy watery oil. Well came in flowing, turned to trap to clean up at est 60-80 M/D with 100 psi sfc pressure, well headed between 20 M/D to 160 M/D for 1 hr 45 mins, then died. Rec .8' oil in 400 bbl tank = to 4.5 B/hr rate. Oil 42° API @ 56°F w/25% cut black sulfurous water. Shut in to wait daylight to swab. At 8:15 A.M. the well had built up 100 psi, turned to trap at 100 M/D est steadily declining to dead at 9:00 A.M. Shut well in prep to acid job.

Dowell acidized intervals in 7-5/8" csg 8616-8626' w/RTTS tool set at 8607'. HM pkr at 8579'. Squeezed 2000 gallons jell x 100 - w/1200# psi to 1600# psi. Started acidizing at 2:37 P.M. Completed at 5:50 P.M. Pressure bled off from 1300# psi at 5:50 P.M., on vacuum at 6:11 P.M. Used 54 bbls water to flush with.

December 16, 1960

Ran Welex and checked collars at 8370', 8407', 8451', 8488', 8525', 8567'. Then shot 4 - 1/2" holes per ft w/Dyng shots 8480-90, 8458-74, 8446-52, 8438-42'. Ran in hole w/6-5/8 bit - 7-5/8 Baker casing scrapper. Clean up perms in casing 8403-8626. Top bridge plug at 8650'. Pulled out laying down 3-1/2 DP. Ran Baker model D production packer on Welex line. Checked collars as above. Set pkr in 7-5/8 casing at 8580'. Ran Baker retrievable bridge plug on 2-1/2" tubing to 1674. Set pkr, pld tubing. Took out BOE. Hooked up production equipment and Shaffer offset BOE.

December 17, 1960

Pressure tested BOPE to 2500 psi. Held OK
Retrieved Baker retrievable bridge plug at 1674'.

December 18, 1960

Landed 2-1/2" tubing at 8580' in Baker Model D production packer.

Tubing detail:

Bottom		2.0'	Baker seal nipple and locator sub.
Next	10 jts	306.44	201/2" EUE 6.5# N-80 externally plastic coated tbg.
Next		8.68	Baker Model K packer
Next		.88	Baker L.H. Safety joint
Next		1.10	PSN
Next	261 jts	8,226.81	2-1/2" EUE 6.5# N-80 tapered collar/clearance new Sals CF&I tubing
Next	3 jts	18.80	2-1/2" EUE 6.5# N-80 tubing pups.
Top		12.45	KB to tubing head
		<u>8,576.36'</u>	

WELL NO: 21-15 (1) (Arnold)

PROPERTY: Section 15

N. W. LISBON FIELD

December 18, 1960 (cont.)

Ran 2-3/8" OD tubing to 8266' and pumped in Hydrazine treated water in 2-3/8 x 2-7/8 x 7-5/8" annulus Stabbed into Baker Model K packer and landed with 5000# weight on packer. Type S nipple at 1516'.

2-3/8" tubing detail:

Bottom		5.50'	Baker seal nipple
Next	216 jts	6,744.03'	2-3/8" non-upset 4.5# N-80 tapered collar internally plastic coated new smls tubing
Next		1.10'	2.625" OD 1.875" ID Otis Type "S" landing nipple
Next	48 jts	1,503.26'	2-3/8" tubing as above.
Total		<u>8,253.89'</u>	
Landed		12.45'	Below K. B.
		<u>8,266.34'</u>	

December 19, 1960

Tested Xmas tree to 4700 psi. Held OK.

Crew released 8:00 A.M. 12-19-60.

T. R. HULL
R. H. SELF

BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF UTAH

IN THE MATTER OF THE APPLICATION OF)
CALIFORNIA OIL COMPANY FOR AN ORDER) FINDINGS OF FACT
AUTHORIZING APPLICANT TO PERFORM A)
MULTIPLE ZONE COMPLETION IN THE) AND ORDER
ARNOLD WELL NO. 21-15 (1), LOCATED)
IN NE~~1/4~~ SECTION 15, TOWNSHIP 30)
SOUTH, RANGE 24 EAST, S.L.M., SAN)
JUAN COUNTY, UTAH.) Cause No. 50
)
)

STANDARD OIL COMPANY OF CALIFORNIA has heretofore filed an application for an order authorizing it to perform a multiple zone completion in the Arnold Well No. 21-15 (1) located in the NE~~1/4~~ Section 15, Township 30 South, Range 24 East. Upon consideration of said application and being fully advised in the premises, the Commission finds as follows:

FINDINGS

1. This application was filed on behalf of Standard Oil Company of California by Standard Oil Company of California, Western Operations, Inc., its Attorney in Fact. Since the filing of the application, the ownership of the lease covering the NE~~1/4~~ Section 15, Township 30 South, Range 24 East, S.L.M. was transferred to The California Company and the latter Company was merged into California Oil Company, a California corporation, the present operator under such lease.

2. The Commission has jurisdiction over the subject matter herein and notice has been given in all respects as required by law and the rules of the Commission.

3. The area covered by said lease, which is designated as Utah 09179, is located within the confines of the Lisbon Field as such field has been presently defined and designated by the Commission. The Commission has previously approved, after notice and hearing in Cause No. 31, a multiple zone completion of a well in the Lisbon Field.

4. From information obtained in the course of drilling and testing the Arnold Well No. 21-13 (1), it appears that commercial production exists in two separate zones or formations, namely in the Ouray formation of Devonian age and in the carbonates of Mississippian age with an intervening impermeable zone or zones. The mechanical procedures outlined in the application herein are such as will prevent any commingling in the well bore of production from the Ouray formation with production from the Mississippian formation and will allow separate producing, measuring and controlling of production from the two formations.

5. The multiple zone procedure proposed will not result in damage to either the Ouray or the Mississippian formation and will not adversely affect the rights of any other lessee or interested party.

ORDER

It is therefore ORDERED by the Oil and Gas Conservation Commission of the State of Utah as follows:

1. California Oil Company, a California corporation, is hereby substituted as applicant in the place of Standard Oil Company of California.

2. California Oil Company be and it is hereby authorized to undertake multiple zone completion in the Ouray formation and in the carbonates of Mississippian age in accordance with the procedure outlined in the application on file herein.

Dated this 10th day of January, 1961.

OIL AND GAS CONSERVATION
COMMISSION OF THE
STATE OF UTAH

Edward W. Clyde,
Commissioner Presiding

C. N. Henderson
Chairman

C. S. Thompson

M. V. Hatch

**STANDARD OIL COMPANY OF CALIFORNIA,
WESTERN OPERATIONS, INC.**

P. O. BOX 455 • VERNAL • UTAH

PRODUCING DEPARTMENT
C. V. CHATTERTON
DISTRICT SUPERINTENDENT

January 17, 1961

U. S. Geological Survey
P. O. Box 1809
Durango, Colorado

Gentlemen:

Attached are two copies of our Completion Report for
Arnold 21-15 (1), Lisbon Valley, Utah.

Please note that initial production information has
not been included on our report. We anticipate this
well will be placed on production within a few days
and initial production data will be forwarded your
office as soon as available.

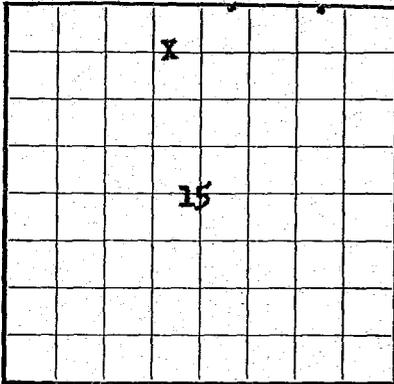
Yours truly,
Original Signed
C. V. CHATTERTON

C. V. CHATTERTON

cc: Oil and Gas Conservation Commission _____

T308

U. S. LAND OFFICE Salt Lake City
SERIAL NUMBER U-09179
LEASE OR PERMIT TO PROSPECT _____



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company California Oil Co., Western Division Address P. O. Box 455, Vernal, Utah
Lessor or Tract U-09179 Field Lisbon State Utah
Well No. 21-15 Sec. 15 T. 308 R. 24E Meridian SLB County San Juan
Location 765 ft. N of S Line and 184 ft. E of W Line of Sec. 15 Elevation 6306'
(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 R. L. GREEN

Date April 20, 1961

Title Division Superintendent

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

Commenced drilling September 6, 1960 Finished drilling December 19, 1960

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 8098' to 8600' No. 4, from _____ to _____
No. 2, from 8618' to 8626' 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		Depth
							From-	To-	
<u>13-3/8"</u>	<u>51.5#</u>		<u>J-55</u>	<u>1223'</u>			<u>8103</u>	<u>8105</u>	<u>8510-8530</u>
<u>7-5/8"</u>	<u>33.7#</u>		<u>N-80</u>	<u>9077'</u>			<u>8127</u>	<u>8129</u>	<u>8561-8566</u>
							<u>8138</u>	<u>8142</u>	<u>8594-8598*</u>
							<u>8146</u>	<u>8152</u>	<u>8616-8626</u>
							<u>8158</u>	<u>8174</u>	<u>8912-8920</u>
							<u>8180</u>	<u>8190</u>	<u>8958-8966</u>
<u>Cut circular notches @ 8916', 8952', 8968'</u>									

MUDDING AND CEMENTING RECORD *Perfs 8594-8598 sealed with cement

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
<u>13-3/8"</u>	<u>1205'</u>	<u>800 sack common</u>			
<u>7-5/8"</u>	<u>9046'</u>	<u>1100 sack 50-50 pozmix</u> <u>200 sack neat latex</u>			

MUDDING AND CEMENTING RECORD *Perfs 8594-8598 sealed with cement

FOLD MARK

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8"	1205'	800 sack common			
7-5/8"	904 1/2'	1100 sack 50-50 pozmix 200 sack neat latex			

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

TOOLS USED

Rotary tools were used from surface feet to 9050 feet, and from _____ feet to _____ feet
 Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

_____, 19____ Put to producing Mississippian Jan. 21, 1961
Curay Feb. 8, 1961
 The production for the first 24 hours was M-605 barrels of fluid of which M-92% was oil; _____%
 emulsion; 0-8% water; and _____% sediment. Gravity, °Bé. 530
 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
 _____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	965	965	Sand and shale
965	1225	250	Shale and sand strks
1225	2081	856	Sand and shale
2081	2820	739	Shale with strks of sand
2820	2895	75	Line with strks of chert
2895	3192	297	Line and shale
3192	3585	393	Line and siltstone
3585	3797	212	Line and sand
3797	3902	105	Line, shale and sand
3902	3996	94	Line, shale 30% chert
4350	4459	109	Salt and shale
4459	5764	1305	Shale with strks of salt and anhydrite
6183	6590	407	Shale and salt
6590	6596	6	Salt clastus shales
6596	6606	10	Salt and shales
6606	6626	20	Shale and siltstone
6626	7116	490	Salt and shale
7116	7176	60	Shale
7176	7244	68	Shale, salt and anhydrite
7244	7302	58	Shale with salt strks
7302	7662	360	Salt and shale strks
7662	7772	110	Shale with salt strks
7772	7880	108	Sandy shale, dolomite, anhydrite and salt
7880	8000	120	Salt strks, dolomite and anhydrite
8000	8028	28	Chert, dolomite, shale, anhydrite and salt
8028	8063	35	Shale, dolomite and anhydrite

OVER

10-48094-4

APR 27 1960

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
8063	8120	57	Shale, siltstone, dolomite & anhydrite - lime and chert
8120	8168	48	Anhydrite, lime and chert
8168	8223	55	Lime and chert
8223	8258	35	Dolomite
8258	8310	52	Dolomite and chert
8310	8370	60	Lime, shale and anhydrite
8370	8423	53	Lime and anhydrite
8423	8538	115	Sandstone and shale
8538	8596	58	Chert, lime and sand
8596	8722	126	Lime and shale
8722	8760	38	Lime and dolomite with strks of chert
8760	8820	60	Core #1. Cut and rec 60'. 60' of dolomite and streaks of shale.
8820	8878	58	Core #2. Cut and rec 58'. 58' of dolomite.
8878	8936	58	Core #3. Cut and rec 58'. 58' of dolomite and sandy dolomite.
8936	8994	58	Core #4. Cut and rec 58'. 58' of quartzite.
8994	9050	56	Core #5. Cut and rec 56'. 56' of dolomite and dolomitic shale.

		0

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake
Lease No. U-09179
Unit Lisbon

Sec. 15

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....		SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	X
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

June 18, 1962

Lisbon Unit
Well No. B-615 is located 765 ft. from S line and 1240 ft. from E line of sec. 15
NW NE Sec. 15 30S 24E SLM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Lisbon San Juan Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the ~~surface~~ ground above sea level is 6295 ft.
KB elevation 6307 ft.
DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Well designation changed due to unitization of Lisbon Field effective 5/1/62.

OLD DESIGNATION

California Oil Co. Arnold 21-15

NEW DESIGNATION

Lisbon Unit #B-615

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company THE PURE OIL COMPANY
Address P. O. Box 265
Moab, Utah
Alpine 3-3581
By L. K. Cogan
Title Office Manager

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R356.5
Approval expires 12-31-60.
Salt Lake City
LAND OFFICE
U-09179 (Arnold)
LEASE NUMBER
Lisbon Valley
UNIT

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County San Juan Field Lisbon Valley
The following is a correct report of operations and production (including drilling and producing wells) for the month of September, 1963.
Agent's address P. O. Box 780 Company California Oil Company
Denver 1, Colorado Signed R. W. Train, RFO
Phone Amherst 6-0681 Agent's title Chief Clerk

SEC. AND M OF M	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NE NW15	30S	24E	21-15	0	-0-	-	-0-		-0-	Ouray Only Temporarily Abandoned

Copies:

U. S. G. S., Roswell - 3; O&GCC, Salt Lake City - 1; Humble, Durango - 1;
Elliot - 1; Pure, Moab - 1; Quintana, Houston - 1; O&GCC, Moab - 1;
Belco, Grand Junction - 1; File - 1.

NOTE.—There were NO runs or sales of oil; NO M cu. ft. of gas sold;
NO runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

KGW

PMO
7

2404 D. K.
Case 4417

Budget Bureau No. 49-2386.A
Approval expires 12-31-63.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake City
LEASE NUMBER U-09179 (Arnold)
UNIT Lisbon Valley

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County San Juan Field Lisbon Valley

The following is a correct report of operations and production (including drilling and producing wells) for the month of October, 1963,

Agent's address P. O. Box 780 Company California Oil Company
Denver 1, Colorado Signed R. W. Stearns, KJO

Phone AM 6-0681 Agent's title Chief Clerk

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NE NW 15	30S	24E	21-15	0	0	-	0		* 74	Ouray only temporarily abandoned *water previously produced and drawn off from tanks

WGA 2 893

cc: USGS Roswell - 3
O&GCC, Salt Lake City - 1
Humble, Durango - 1
Elliot - 1
Pure, Moab - 1
Quintana, Houston - 1
O&GCC, Moab - 1
Belco, Gr. Jct. - 1
File - 1

NOTE.—There were 534.67 runs or sales of oil; No M cu. ft. of gas sold;
No runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved.
Budget Bureau No. 43-2364.A
LAND OFFICE Salt Lake City
LEASE NUMBER U-09179 (Arnold)
UNIT Lisbon Valley

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County San Juan Field Lisbon Valley

The following is a correct report of operations and production (including drilling and producing wells) for the month of November, 1963,

Agent's address P. O. Box 780 Company California Oil Company

Denver 1, Colorado Signed R.W. Strain RPO

Phone 266-0681 Agent's title Chief Clerk

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DATE PRODUCTION	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NE NW 15	30S	24E	21-15	-0-	* (109)		-0-		* 109	Ouray Only * B S & W previously produced and withdrawn from tanks.
Temporarily Abandoned										
Request permission to discontinue reporting.										

cc: U.S.G.S. - Roswell - 3
O & G.C.C. - Salt Lake - 1
Humble, Durango - 1
Elliot, Roswell - 1
Pure, Moab - 1
Quintana, Houston - 1
O. & G. C. C., Moab - 1
Belco, Gr. Jct. - 1
File - 1

NOTE.—There were No runs or sales of oil; No M cu. ft. of gas sold; No runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 8th of the succeeding month, unless otherwise directed by the supervisor.

December 9, 1963

California Oil Company
P. O. Box 780
Denver 1, Colorado

Attention: Chief Clerk

Re: Well No. Arnold 21-15
Sec. 15, T. 30 S, R. 24 E.,
San Juan County, Utah

Gentlemen:

We are in receipt of your "Lessee's Monthly Report of Operations" for November, 1963, requesting permission to discontinue reporting the Ouray Formation as being temporarily abandoned. Insofar as this office is concerned, permission is hereby granted.

When and if you decide to rework this formation, you are required to file a new notice of intention to drill with this Commission.

Very truly yours,

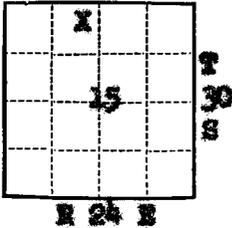
OIL & GAS CONSERVATION COMMISSION

CLARELLA N. PECK
RECORDS CLERK

cnp

Copy H.C.C.

Budget Bureau No. 42-R358.4.
Form Approved.
Salt Lake City
Land Office
Lease No. **U-09179**
Unit



(SUBMIT IN TRIPLICATE)
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....		SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO OPERATE SUSPEND ORARY OPERATION	X		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Vernal, Utah **December 17**, 19**63**

Well No. **Arnold 21-15 (1)** is located **765** ft. from **[N]** line and **1840** ft. from **[E]** line of sec. **15**
NE 1/4 NW 1/4 15 **308** **24E** **S12M**
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Lisbon **San Juan** **Utah**
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is **6306** ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

It is proposed to suspend the uneconomical Oury Formation of this dually completed well as follows:

- 1. Pull rods, pump and bull plug pumping tee.**
- 2. Remove all salvagable surface equipment.**
- 3. Mississippian formation to be produced as part of Lisbon Unit as before.**

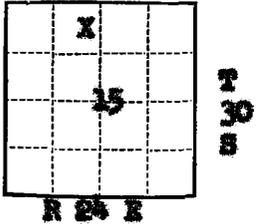
Last Oury Production: 19 BOPD, 6 MFPD, 208 MCF/D

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company **California Oil Company, Western Division**
 Address **P. O. Box 455**
Vernal, Utah
 Original Signed by **R. W. PATTERSON**
 By **R. W. PATTERSON**
 Title **Superintendent**

UNGS, Durango - 3; OMSCC, SLC-1; Humble - 1; Quintana - 1; File - 1

Supv. H. R. E.



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake City

Lease No. U-09179

Unit _____

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....	SUBSEQUENT REPORT OF SUSPENDING OPERATIONS OURAY ZONE ONLY	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Vernal, Utah December 17, 19 63

Well No. Arnold 21-15 (1) is located 765 ft. from [N] line and 1840 ft. from [W] line of sec. 15
NE 1/4 NW 1/4 15 30S 24E S12M
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Lisbon San Juan Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 6306 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

The following well work was performed on the subject well to suspend production from the Ouray Formation.

1. Pulled rods. Installed bull plug in pumping tee.
2. Removed all salvagable surface producing equipment, work completed 11-21-63.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company California Oil Company, Western Division
 Address P. O. Box 455
Vernal, Utah
 Original Signed by R. W. PATTERSON
 By R. W. PATTERSON

Title Superintendent

WSS, Durango - 3; OAGCC - 1; Humble-1; Quintana-1; File-1

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

SUBMIT IN TRIPlicate*
(Other instructions on re-verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SL U-09179

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

7. UNIT AGREEMENT NAME

Lisbon Unit

8. FARM OR LEASE NAME

9. WELL NO.

Lisbon Unit B-615

10. FIELD AND POOL, OR WILDCAT

Lisbon - Miss.

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 15, T-30S, R-24E

12. COUNTY OR PARISH 13. STATE

San Juan

Utah

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR

THE PURE OIL COMPANY

3. ADDRESS OF OPERATOR

P. O. Box 1611 - Casper, Wyoming

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

765' FNL and 1840' FWL, NE NW

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

GR 6295'

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The following remedial work is proposed:

Set packer on tubing between perfs in gas cap and oil zone at 8,455' and test for communication. Repeat at 8,477' and 8,500'. Well now produces considerable cap gas and a partial shut off could be obtained by selective packer setting if no communication exists between perforations. If lower GOR is not obtained, squeeze perforations in gas cap interval above 8,500'. Perforating and treating of oil zone may be required after squeezing upper perforations.

18. I hereby certify that foregoing is true and correct

SIGNED **R. E. DAVIS**

R. E. Davis

TITLE **District Office Manager**

DATE **Jan. 6, 1964**

(This space for Federal or State office use)

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Copy H. T. E.

X		
	15	

T
30
E

R 24 E

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office **Salt Lake City**

Lease No. **U-09179**

Unit _____

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....		SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON well Curay Formation	X		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Vernal, Utah **March 19**, 19**64**

Well No. **Arnold 21-15 (1)** located **765** ft. from **[N]** line and **1840** ft. from **[W]** line of sec. **15**
NE 1/4 NW 1/4 15 **308** **24E** **BLM**
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Lisbon **San Juan** **Utah**
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is **6306** ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

It is proposed to abandon the Curay Formation in the subject well as follows:

1. Perforate Curay tubing string above stuck pump and circulate well.
2. Pull Curay tubing and Mississippian tubing strings.
3. Insert BR plug in Model "F" packer at **8500'** and set bridge plug at **+ 8575'**.
4. Recompletion will be performed in the Mississippian Formation by the Pure Oil Co., Unit Operator, who will file a notice for this intended work.

APPROVED BY UTAH OIL AND GAS
CONSERVATION COMMISSION

DATE: **3-24-64** by **[Signature]**
Chief Petroleum Engineer

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company **California Oil Company, Western Division** Original Signed By _____

Address **P. O. Box 455** **R. W. PATTERSON**

Vernal, Utah By **R. W. PATTERSON**

Title **Unit Superintendent**

USGS, Durango - 3; Humble-1; Quintana-1, OSGCC-1; File-1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SL U-09179

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

7. UNIT AGREEMENT NAME

Lisbon Unit

8. FARM OR LEASE NAME

Lisbon Unit

9. WELL NO.

B-615

10. FIELD AND POOL, OR WILDCAT

Lisbon - Miss.

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 15, T-30S, R-24E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR

The Pure Oil Company

Calif - approx 21-15

3. ADDRESS OF OPERATOR

P. O. Box 1611 - Casper, Wyoming

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

765' FNL and 1840' FwL, NE NW

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

GR 6295'

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) Supplementary Well History

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

SEE SUPPLEMENTAL SHEET ATTACHED

18. I hereby certify that the foregoing is true and correct

ORIGINAL SIGNED BY

SIGNED R. E. DAVIS

TITLE District Office Manager

DATE 4-14-64

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

SUNDRY NOTICES AND REPORTS ON WELLS

Lisbon Unit B-615
765' FNL and 1840' FWL, NE NW
Sec. 15, T-30S, R-24E
San Juan County, Utah
The Pure Oil Company - Operator

Supplementary Well History
Serial No: SL U-09179

April 14, 1964

Barker Well Service moved in and rigged up April 1, 1964. Killed well with salt water. Pulled and laid down 264 jts. of 2" non-upset tubing and 271 jts. of 2-1/2" 8 Rd. EUE tubing and Baker Model K packer. Ran 2-1/2" Baker latching DR plug and set in Model "D" packer at 8,580'. Dumped one sack of regular cement, using glass bottom bailer, on top of Baker DR plug, 8,568' PBT. Ouray formation temporarily abandoned.

Ran 2-1/2" tubing. Top packer, Model "M", set at 8,359.52'; bottom packer, Model "R-2", set at 8,513.15'. Swabbed to pit from perforations 8,510' - 30' and 8,561' - 66'. Recovered small amount of gas, water and oil. Shut in for night. Opened well to pit at 8:00 a.m. 4-5-64 and well flowed to pit by heads - oil, gas and water - 60% oil, 40% water. Swabbed from 7,500', approximately 4 bbls. per hour.

Pumped salt water down tubing to kill well. Pulled tubing and packer assembly. Reset bottom packer (Model R-2) between perforated zones in oil section at 8,475'. Top of top packer (Model M) set at 8,332'. Reset tree and started swabbing from perforations 8,480' - 8,490'; 8,510' - 8,530' and 8,561' - 8,566'. Swabbed down to 7,000' and shut down for night. On April 7, 1964, swabbed one hour and well started flowing. Flowed to pit 8 hours to clean up. Turned to gathering system at 5:30 p.m. 4-7-64. Rig released at 6:00 p.m. 4-7-64. Fluid through Floco meter on April 8, 1964, corrected 332 bbls. for 24 hours, 27/64" choke, gas metered 1,859 MCFD. Job incomplete.

Copy H. H. E.

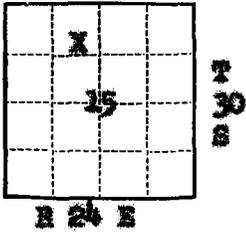
(SUBMIT IN TRIPLICATE)

Land Office Salt Lake City

Lease No. U-09179

Unit Lisbon

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL	SUBSEQUENT REPORT OF TEMPORARY ABANDONMENT OF QUARRY FORMATION	<input checked="" type="checkbox"/>

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

(Lisbon 8615) Vernal, Utah April 23, 1964
 Well No. 21-15 (1) is located 765 ft. from [N] line and 1840 ft. from [W] line of sec. 15
NE 1/4 NW 1/4 15 308 24E 112W
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Lisbon San Juan Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the ~~surface~~ Kelly Banking above sea level is 6306 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

The following work was performed on subject well:

Barker Well Service moved in and rigged up April 1, 1964. Killed well with salt water. Palled and laid down 264 jts of 2" non-squeet tubing and 271 jts of 2-1/2" 8 RD. EHE tubing and Baker Model K packer. Ran 2-1/2" Baker latching DR plug and set in Model "D" packer at 8,580'. Dumped one sack of regular cement, using glass bottom bailer, on top of Baker DR plug, 8,568' PHTD. Quarry formation temporarily abandoned. ✓

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company California Oil Company, Western Division

Address P. O. Box 455

Vernal, Utah

By R. W. PATTERSON

Title Superintendent of Operations

URCS, Durango03; OMSCC, SLO-1; Humble-1; Quintana-1; File-1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SL U-09179

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Lisbon Unit

8. FARM OR LEASE NAME

Lisbon Unit

9. WELL NO.

B-615

10. FIELD AND POOL, OR WILDCAT

Lisbon - Miss.

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 15, T-30S, R-24E

12. COUNTY OR PARISH 13. STATE

San Juan

Utah

1.

OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR

The Pure Oil Company

3. ADDRESS OF OPERATOR

P. O. Box 1611 - Casper, Wyoming

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

765' FNL and 1840' FWL, NE NW

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

GR 6295'

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

Supplementary Well History

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

SEE SUPPLEMENTAL SHEET ATTACHED

18. I hereby certify that the foregoing is true and correct

ORIGINAL SIGNED BY

SIGNED

R. E. DAVIS

TITLE

District Office Manager

DATE

4-29-64

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

SUNDRY NOTICES AND REPORTS ON WELLS

Lisbon Unit B-615
765' FNL and 1840' FWL, NE NW
Sec. 15, T-30S, R-24E
San Juan County, Utah
The Pure Oil Company - Operator

Supplementary Well History
Serial No: SL U-09179

April 29, 1964

On April 27, 1964 Barker Well Service moved in and rigged up. Killed well with salt water. Stripped off head and unseated packers. Laid down 4' tubing nipple. Picked up 1 jt. of 2-1/2" EUE 8 Rd. Thd. Inter-Lined tubing to replace 4' nipple. Lowered packers. Top of bottom packer at 8,500'. Reset packers, 14,000# set on packers. Reset well head. Swabbed load water to pit. Cleaned well to pit until 3:00 p.m. when well was shut in.

On April 28, 1964, tubing pressure 1350# after being shut in 16 hours overnight. Opened well to pit. Acidized perforations 8,510'-30' and 8,561'-66' with 2,000 gals. H owco 15% CRA acid. Started acid down tubing. Pressure zero. Followed by salt water displacement. Pressure remained zero throughout job. Well on vacuum. Started swabbing and swabbed down to 3,500' in 5 runs. Well started flowing. Cleaned to pit for two hours and then turned through Floco meter. Rig released at 11:00 a.m. 4-28-64.

On 21 hour test, 20/64" choke, 860# TP, 680# separator pressure, well produced 465 bbls. of oil, 620,000 cu. ft. of gas.

Remedial work completed.

BEFORE THE BOARD OF OIL AND GAS CONSERVATION
DEPARTMENT OF NATURAL RESOURCES
in and for the STATE OF UTAH

oooooooooooooooooooo

IN THE MATTER OF THE APPLICATION OF UNION
OIL COMPANY OF CALIFORNIA FOR AN ORDER
AUTHORIZING THE CONVERSION OF THE LISBON
UNIT WELL NO. B-615 TO AN INJECTION WELL
AND THE INJECTION THEREIN OF SURPLUS
LIQUIFIED PETROLEUM GAS (LPG) OR GAS
FROM THE LISBON PROCESSING PLANT INTO
THE MISSISSIPPIAN RESERVOIR.

NOTICE OF HEARING

CAUSE NO. 136-1

oooooooooooooooooooo

THE STATE OF UTAH TO ALL OPERATORS, TAKERS OF PRODUCTION, MINERAL AND ROYALTY
OWNERS, AND PARTICULARLY ALL PERSONS INTERESTED IN THE LISBON FIELD, SAN JUAN
COUNTY, UTAH.

*Notice is hereby given that the Board of Oil and Gas Conservation, of
the State of Utah, will conduct a hearing on Wednesday, the 11th day of June, 1969,
at 10:00 A.M., in the Governor's Board Room, 2nd Floor State Capitol Building, Salt
Lake City, Utah, in the above entitled cause, at which time all persons, firms and
corporations interested may, if they so desire, appear and be heard.*

*Notice is further given that the purpose of said hearing will be to det-
ermine whether or not the Board should enter an order permitting and authorizing
Union Oil Company of California to inject surplus liquified petroleum gas (LPG)
or gas into the Mississippian Formation through Applicant's Well No. B-615, located
in Section 15, Township 30 South, Range 24 East, SLBM, San Juan County, Utah.*

DATED this 20th day of May, 1969.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
BOARD OF OIL AND GAS CONSERVATION

Cleon B. Feight
CLEON B. FEIGHT
SECRETARY

Schwarz

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-09179

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

7. UNIT AGREEMENT NAME

Lisbon

8. FARM OR LEASE NAME

Lisbon Unit

9. WELL NO.

B-615

10. FIELD AND POOL, OR WILDCAT

Lisbon-Mississippi

11. SEC., T., R., M., OR BEK. AND
SURVEY OR AREA

Sec. 15, T-30S, R-24E

12. COUNTY OR PARISH 13. STATE

San Juan

Utah

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Union Oil Company of California

3. ADDRESS OF OPERATOR
P. O. Box 1611 - Casper, Wyoming 82601

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
765' FWL and 1840' FWL (NE NW)

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

6,294.6' GR

6,307' KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) Convert to LPG Injection Well X	

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) _____	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

SIX SUPPLEMENTAL SHEET ATTACHED

APPROVED BY DIVISION OF
OIL & GAS CONSERVATION

DATE **7-7-69**
BY **Dem B. Bright**

18. I hereby certify that the foregoing is true and correct

SIGNED **HAROLD SIMPSON**
Harold Simpson

TITLE **Dist. Operations Manager**

DATE **June 19, 1969**

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

PWB

SUNDRY NOTICES AND REPORTS ON WELLS

Union Oil Company of California
P. O. Box 1611 - Casper, Wyoming 82601

Lisbon Unit Well B-615
Lse. No. U-09179
San Juan County, Utah

Notice of Intention To: Convert to LPG Injection Well

June 19, 1969

SUPPLEMENTAL ATTACHMENT

Lisbon Unit B-615 (Originally California Oil - Arnold 21-15) was drilled to total depth of 9,050'. Completed as a dual producer from Ouray and Mississippian formations. April 3, 1964 well was plugged back to 8,568', plugging off the Ouray formation.

Casing set as follows:

20" Conductor casing set at	28' with 35 sacks cement
13-3/8" OD 54.5# J-55 casing set at	1,223' with 800 sacks common w/ 2% calcium chloride
7-7/8" OD 33.7# N-80 casing set at	9,077' with 1100 sacks 50-50 Pozmix and 200 sacks Neat Latex

Perforations as follows: (4 1/2" Dynajets per foot)

8,403' - 8,405'
8,427' - 8,429'
8,438' - 8,442'
8,446' - 8,452'
8,458' - 8,474'
8,480' - 8,490'
8,510' - 8,530'
8,561' - 8,566'

Last produced in August 1967 with GOR of 10,491. Cumulative production 521,587 BO, 3,148,092 MCF gas and 6,615 BW.

Propose to inject surplus LPG during periods of depressed market conditions to prevent flaring LPG. By injecting the excess LPG into B-615, the Plant efficiency will be maintained during low sales periods. Benefits could be gained by accelerated cycling and pressure maintenance in oil recovery. ✓

Union Oil Company of California

1860 Lincoln Street, Denver, Colorado 80203
Telephone (303) 266-3331



Northern Division

June 27, 1969

United States Geological Survey
Drawer 1857
Roswell, New Mexico 88201

ATTENTION: Mr. John A. Anderson
Regional Oil and Gas
Supervisor

Re: Lisbon Unit, Injection of LPG
in Unit Well No. B-615

Gentlemen:

In connection with the injection of Liquefied Petroleum Gas (LPG) in the Lisbon Unit Well No. B-615 as previously discussed with you, we enclose the following:

1. A copy of Order, Cause No. 136-1 Oil and Gas Conservation Board, State of Utah (unsigned). This was approved after the hearing on June 11, 1969; and upon receipt of the final approved Order, we will furnish you a copy.
2. Original and two copies of Form 9-331, Notice of Intention to Convert to LPG Injection Well.

We trust the enclosures will satisfy your requirements in connection with this program; however, should you require any additional information, please so advise.

Yours very truly,
ORIGINAL SIGNED BY
David C. George by REC
David C. George

DCG:REC:sn
Enclosures

cc: Mr. Cleon B. Feight, Board of Oil & Gas Conservation w/9-331 (2) ✓
J. R. Murphy, Jr.
Harold Simpson

October 23, 1969

Union Oil Company of California
P. O. Box 1611
Casper, Wyoming 82601

Re: Well No. Lisbon Unit #B-615,
Sec. 15, T. 30 S., R. 24 E.,
San Juan County, Utah

Gentlemen:

This letter is to advise you that the Subsequent Report of Converting to LPG Injection is due for the above mentioned well and has not been filed with this office.

It would be appreciated if you could complete the enclosed forms and forward them to this office at your earliest convenience.

Thank you for your cooperation with respect to this request.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

SCHEREE DeROSE
SECRETARY

SD:ah

Enclosures

THE STATE OF UTAH
DIVISION OF OIL AND GAS CONSERVATION

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER LPG Injection WELL		5. LEASE DESIGNATION AND SERIAL NO. U-09179
2. NAME OF OPERATOR Union Oil Company of California		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR P. O. Box 1611 - Casper, Wyoming 82601		7. UNIT AGREEMENT NAME Lisbon
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 765' FNL and 1,840' FWL (NE NW)		8. FARM OR LEASE NAME Lisbon Unit
14. PERMIT NO.		9. WELL NO. B-615
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6,294.6' GR 6,307' KB		10. FIELD AND POOL, OR WILDCAT Lisbon-Mississippian
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 15, T-30S, R-24E
NOTICE OF INTENTION TO: TEST WATER SHUT-OFF <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> MULTIPLE COMPLETE <input type="checkbox"/> SHOOT OR ACIDIZE <input type="checkbox"/> ABANDON* <input type="checkbox"/> REPAIR WELL <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> (Other) <input type="checkbox"/>		12. COUNTY OR PARISH 13. STATE San Juan Utah
SUBSEQUENT REPORT OF: WATER SHUT-OFF <input type="checkbox"/> REPAIRING WELL <input type="checkbox"/> FRACTURE TREATMENT <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> SHOOTING OR ACIDIZING <input type="checkbox"/> ABANDONMENT* <input type="checkbox"/> (Other) Conversion to LPG Inj. Well <input checked="" type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

9,050' TD
8,568' PBSD

Installed high pressure 3" injection line from Lisbon Plant to Well B-615 and high pressure injection pump.

Initial injection of surplus LPG products was August 24, 1969 through perforations 8,403' - 8,566'. ✓

No change was made in well. See attachment.

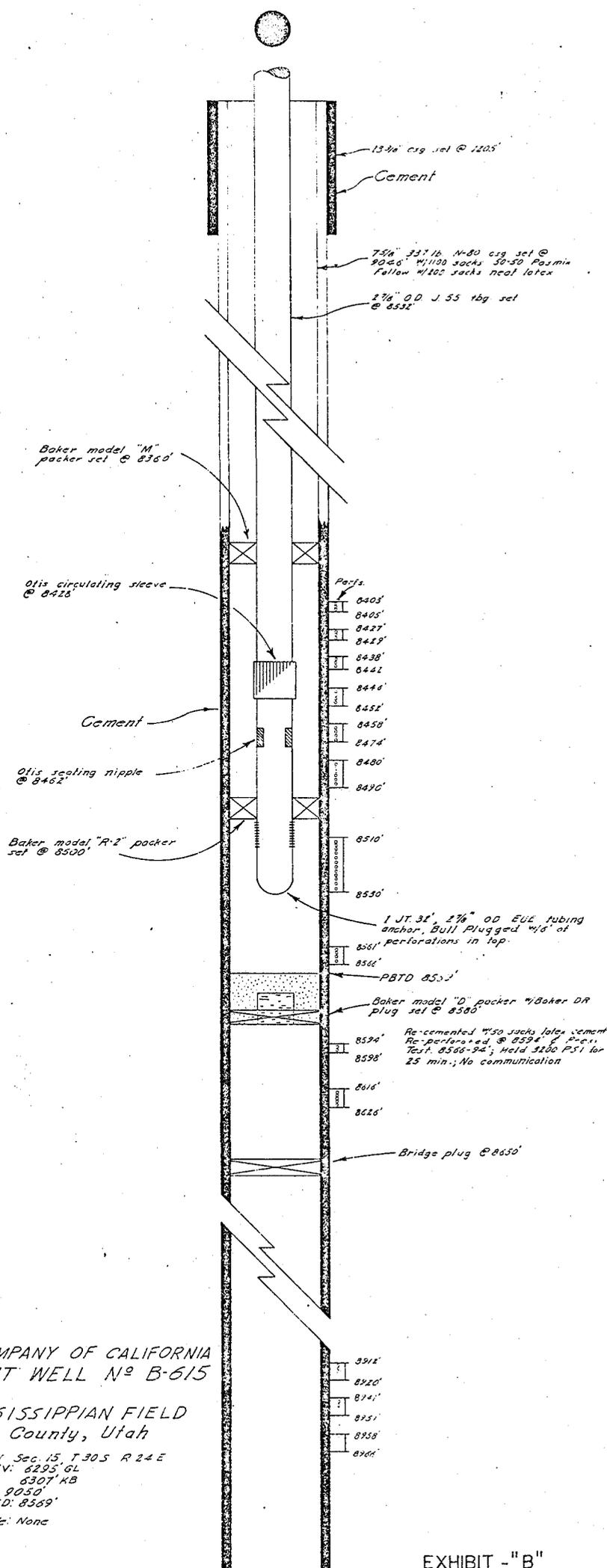
18. I hereby certify that the foregoing is true and correct

SIGNED Harold Simpson TITLE District Operations Manager DATE 10-27-69
Harold Simpson

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

B-615



UNION OIL COMPANY OF CALIFORNIA
 LISBON UNIT WELL NO B-615
 LISBON MISSISSIPPIAN FIELD
 San Juan County, Utah
 LOCATION: NE NW Sec. 15, T30S R24E
 ELEV: 6295' GL
 6307' KB
 TD: 9050'
 PBTD: 8569'
 Scale: None

EXHIBIT - "B"

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ^{only} gas well other

2. NAME OF OPERATOR
Union Oil Company of California

3. ADDRESS OF OPERATOR
P. O. Box 2620 - Casper, WY 82602-2620

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 765' FNL & 1840' FWL (NE NW)
AT TOP PROD. INTERVAL: Straight Hole
AT TOTAL DEPTH: Straight Hole

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input type="checkbox"/>

(other) Replaced Tubing, Cleaned Out & Placed Back on Production

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

9050' TD; 8569' PBSD
13-3/8" @ 1205'
7-5/8" @ 9046'

Drilled in 1960.

Perfs: 8403-8405', 8427-8429',
8438-8442', 8446-8452',
8458-8474', 8480-8490',
8510-8530', 8561-8566'
Perfs Under Plugs: 8594-8598', 8616-8626',
8912-8920', 8941-8951',
8958-8966'

MIRU service unit on 7-26-82. Killed well with 99 bbls. of produced water. Pressured up to 1,700 psi to stab into wellhead. Well on vacuum. R.U. BOP. POOH with 2-7/8" tubing and two packers. Reperforated Mississippian formation, 8,510-8,527', with 4 spf. RIH with two hydraulic packers, circulating

(CONTINUED ON ATTACHED SHEET)

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED R. G. Ladd, Jr. TITLE District Drilling Superintendent DATE 9-11-82

(This space for Federal or State office use)

APPROVED BY [Signature] TITLE Oil & Gas Supervisor DATE SEP 5 1982

5. LEASE
U-09179 OIL & GAS OPERATIONS RECEIVED

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SEP 15 1982

7. UNIT AGREEMENT NAME
Lisbon SALT LAKE CITY, UTAH

8. FARM OR LEASE NAME
Lisbon Unit

9. WELL NO.
B-615 ARND 21-15
13000 B615

10. FIELD OR WILDCAT NAME
Lisbon

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
M25 43-037-15/23
Sec. 15, T.30S., R.24E. NE NW

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
6,294.6' GR; 6,307' KB

RECEIVED

(NOTE: Report results of multiple completion or zone change on Form 9-330.) JUN 6 1984

DIVISION OF OIL
GAS & MINING

U.S. Geological Survey - Form 9-331

Union Oil Company of California
Lisbon Unit Well No. B-615
San Juan County, Utah
9-11-82
Pg. 2

sleeve, and 2-7/8" tubing. Set packers at 8,489.32' and 8,347.41'. Set tubing at 8,494.13' and circulating sleeve at 8,415.39'. Started acid cleanup. Pumped 10 bbls. of produced water at 6 bpm. Pumped 2,000 gallons of 28% HCl & MSR additive. Maximum pressure 2500# at 6 bpm. Minimum pressure 0# at 3.5 bpm. 70 ball sealers used throughout acid job. Flushed with 50 bbls. of produced water. Rigged down well service unit on 8-20-82.

Production Before Workover: Well Idle

Production After Workover: (8-27-82) - Flowed 24 BOPD + 23 BWPD + 3400 MCFD. FTP 1540 psi.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED Budget Bureau no. 1004-013 Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT--" for such proposals

5. Lease Designation and Serial No. UTAH 09179
6. If Indian, Allottee or Tribe Name
7. If Unit or CA. Agreement Designation Lisbon Unit
8. Well Name and No. B-615
9. API Well No. 43-037-1512300
10. Field and Pool, or Exploratory Area Lisbon
11. County or Parish, State San Juan, Utah

SUBMIT IN TRIPLICATE

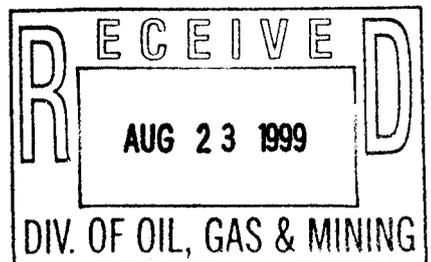
1. Type of Well Oil Gas Well Well Other
2. Name of Operator Tom Brown, Inc.
3. Address and Telephone No. P.O. Box 760 Moab, UT 84532 (435) 686-2236
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2020' FSL, 1980' FWL, Sec 15, T30S-R24E

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

Table with columns TYPE OF SUBMISSION and TYPE OF ACTION. Includes checkboxes for Notice of Intent, Subsequent Report, Final Abandonment Notice, Abandonment, Recompletion, Plugging Back, Casing Repair, Altering Casing, Other Add new perms, Change of Plans, New Construction, Non-Routine Fracturing, Water Shut-off, Conversion to Injection, and Dispose Water.

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally c...

Tom Brown, Inc. plans on perforating 7' of additional pay in the Mississippian formation using thru-tubing perforating guns.



14. I hereby certify that the foregoing is true and correct. Signed [Signature] Title Operations Engineer Date August 16, 1999

(This space for Federal or State office use)

Approved by [Signature] Title [Signature] Date [Signature]
Conditions of approval, if any: Accepted by the Utah Division of Oil, Gas and Mining

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

FOR RECORD ONLY Instruction on Reverse Side

Federal Approval of this Action is Necessary

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SUNDRY NOTICES AND REPORTS ON WELLS

CONFIDENTIAL

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

Do not use this form for proposals to drill, or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. Utah ML-13692
2. Name of Operator: Tom Brown, Inc.		6. If Indian, Allotte or Tribe Name
3. Address and Telephone No. 555 Seventeenth Street, Suite 1850, Denver, CO 80202		7. If Unit or CA/Agreement Designation Lisbon Unit
4. Location of Well (Footage, T, R, M, or Survey Description) 660' FNL & 660' FEL, Sec. ¹⁵ / ₁₆ , T30S, R24E		8. Well Name and No. Lisbon Unit D-616
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		9. API Well No. 43-037-15123
10. Field and Pool, or Exploratory Area Lisbon		11. County or Parish, State San Juan, Utah

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (start/resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input checked="" type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with the BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, A form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

SEE ATTACHED JOB SUMMARY AND WELLBORE DIAGRAM

RECEIVED
MAR 08 2000
DIVISION OF
OIL, GAS AND MINING

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) Byron R. Gale	Title Operations Engineer
Signature <i>Byron R. Gale</i>	Date 02/28/2000

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Tom Brown, Inc.

555 17th Street, Suite 1850
Denver CO 80202-3918
Phone : (303) 260-5058 Fax : (303) 260-5007

WellWork LOE Report

CONFIDENTIAL

Well Name : **Lisbon D 616**
Operator : **Tom Brown, Inc.**
Loc : **NENE**
County : **San Juan, UT**
Field : **Lisbon**
API Code : **43-037-15049**

STR : 16 - 30S - 24E

WI 0.9583452 NRI 0.8162352
WorkType : **Workover**
Job Start Date : **2/27/99**
Rig Co. Name :
Co. Supervisor :
Contractor :

Date :	1/27/00	Days On WellWork:	1
Activity Type :	Rigging Up		
Daily Detail :	MIRU. WO Rig. SICP: 1140#, SITP: 1140#. Bleed pressure down to 200, pump 40 bbls, kill dwn tbg. 120 bbl kill dwn csg. ND tree. NU BOP (well flowing gas up csg). Release Guiberson Uni VI pkr. POOH w/tbg. RU WL, RIH w/WRP. Could not get plug past 7630+/- . POOH w/plug on tbg. Make up plug and RIH w/80 stds. SDFN.		
	Daily Cost :	\$8,500.00	Cum Cost : \$8,500.00
Date :	1/28/00	Days On WellWork:	2
Activity Type :	Test f/Csg Leak		
Daily Detail :	SICP: 30#, RIH w/plug and set @ 8300+/- . Dump 3 buckets of sand on top of plug. POOH w/tbg, PU and RIH w/pkr and plug. Set pkr @ 8,200'. Test plug to 1800#, no bleed off. Roll hole w/fluid, test backside to 1000#, lost 60# in 5 min, tested to 1500#, lost 140# in 15 min, bleed off press to 500#, lost 0# in 15 min, Set pkr @ 7520+/-, tested down tbg to 1600#, press broke back to 200# (poss DV tool leak). Tested annulus to 1280#, lost 80# in 5 min, Rel pkr and RIH to 7820', reset pkr and test to 1600#, no leak off, POOH and attempt to set plug @7570'. Plug not on end of pkr. SDFN.		
	Daily Cost :	\$4,800.00	Cum Cost : \$13,300.00
Date :	1/29/00	Days On WellWork:	3
Activity Type :	Test f/Csg Leak		
Daily Detail :	RIH and retrieve plug. Set plug @ 7520'. Test to 1800 psi. POOH w/ tbg. Set pkr @ 5516', test down tbg to 1,500 psi, bled off to 200# in less than 1 minute. Test backside to 1600#, held good. RIH to top of plug, set pkr, test backside to 1600 psi, leakoff only 40 psi per minute. Latch onto plug, set pkr, test DV tool & btm plug, leak off 80 psi per minute. Reset plug @ 7460' +/- . POOH & set pkr @ 6,500' +/- . Test down tbg to 1500 psi, leak off 80 psi per minute. Test backside, held good. POOH to 5516' +/-, set pkr, RU & swab well in. SDFN.		
	Daily Cost :	\$3,300.00	Cum Cost : \$16,600.00
Date :	1/30/00	Days On WellWork:	4
Activity Type :	SDFWE		
Daily Detail :	SDFWE		
	Daily Cost :	\$0.00	Cum Cost : \$16,600.00
Date :	1/31/00	Days On WellWork:	5
Activity Type :	SDFWE		
Daily Detail :	SDFWE		
	Daily Cost :	\$0.00	Cum Cost : \$16,600.00
Date :	2/1/00	Days On WellWork:	6
Activity Type :	Test f/Csg Leak		
Daily Detail :	SICP: 0, SITP: slight vac. RIH w/swab, FL +/-120 above SN, Release prk. RIH. Retrieve plug. POOH, Set plug @ 5510 +/- . Set Prk @ 4500 +/- . RU and swab well down to SN. No fluid entry. Annulus on slight blow. SDFN.		
	Daily Cost :	\$3,300.00	Cum Cost : \$19,900.00
Date :	2/2/00	Days On WellWork:	7
Activity Type :	Test f/Csg Leak		
Daily Detail :	SICP: 0, SITP: vac. FL @ Pkr, POOH w/Pkr to 3200'. IFL @ 700'. Swab well down to SN. Wait 1 hr, no fluid entry. POOH w/pkr to 2200'. Swab well dwn to SN, no fluid entry. RIH and retrieve plug @ 5510+/- . POOH w/same. PU pkr. RIH w/20 stds. SDFN.		
	Daily Cost :	\$7,000.00	Cum Cost : \$26,900.00

RECEIVED

MAR 08 2000

Tom Brown, Inc.

555 17th Street, Suite 1850
Denver CO 80202-3918
Phone : (303) 260-5058 Fax : (303) 260-5007

WellWork LOE Report

CONFIDENTIAL

Well Name : Lisbon D 616
Operator : Tom Brown, Inc.
Loc : NENE
County : San Juan, UT
Field : Lisbon
API Code : 43-037-15049

STR : 16 - 30S - 24E

WI 0.9583452 NRI 0.8162352
WorkType : Workover
Job Start Date : 2/27/99
Rig Co. Name :
Co. Supervisor :
Contractor :

Date : 2/3/00		Days On WellWork: 8
Activity Type : SI		
Daily Detail : SICP vacuum. RIH to 3,500' and set pkr. Swab well down to seating nipple. SI well. Final report until work resumes.		
	Daily Cost : \$2,200.00	Cum Cost : \$29,100.00
Date : 2/4/00		Days On WellWork: 9
Activity Type : SI		
Daily Detail : SI. WO logging.		
	Daily Cost : \$0.00	Cum Cost : \$29,100.00
Date : 2/5/00		Days On WellWork: 10
Activity Type : SI		
Daily Detail : SI. WO logging.		
	Daily Cost : \$0.00	Cum Cost : \$29,100.00
Date : 2/6/00		Days On WellWork: 11
Activity Type : SI		
Daily Detail : SI. WO logging.		
	Daily Cost : \$0.00	Cum Cost : \$29,100.00
Date : 2/7/00		Days On WellWork: 12
Activity Type : SI		
Daily Detail : SI. WO logging.		
	Daily Cost : \$0.00	Cum Cost : \$29,100.00
Date : 2/8/00		Days On WellWork: 13
Activity Type : SI		
Daily Detail : SI. WO logging.		
	Daily Cost : \$0.00	Cum Cost : \$29,100.00
Date : 2/9/00		Days On WellWork: 14
Activity Type : SI		
Daily Detail : SI. WO logging.		
	Daily Cost : \$0.00	Cum Cost : \$29,100.00
Date : 2/10/00		Days On WellWork: 15
Activity Type : SI		
Daily Detail : SI. WO logging.		
	Daily Cost : \$0.00	Cum Cost : \$29,100.00
Date : 2/11/00		Days On WellWork: 16
Activity Type : Rigging Up		
Daily Detail : SITP: vacuum, SICP: 0. RU Schlumberger. Log from 8282 to 3550. POOH w/pkr & tbg. RIH W/31 stands. SDFN.		
	Daily Cost : \$11,000.00	Cum Cost : \$40,100.00

RECEIVED

MAR 08 2000

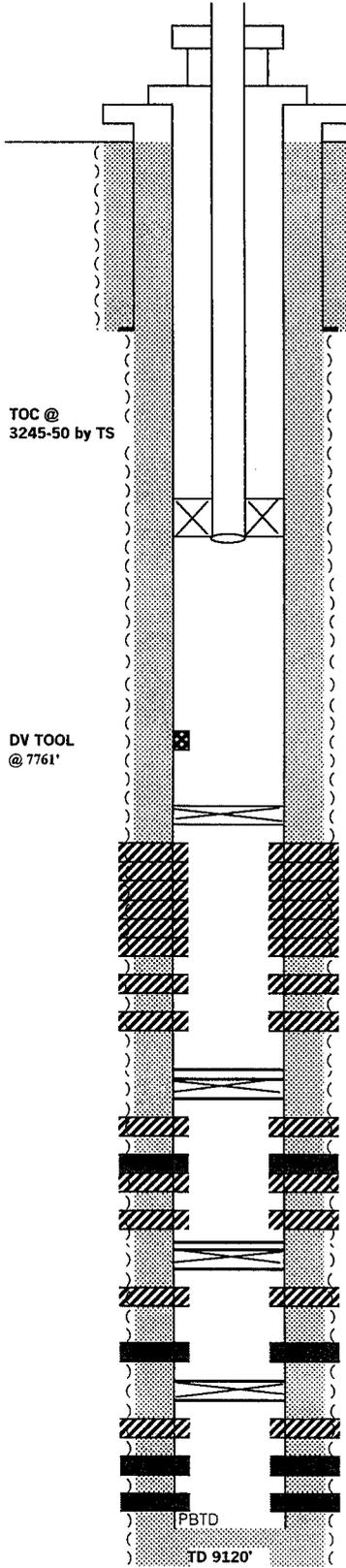
**DIVISION OF
OIL, GAS AND MINING**

WELLBORE DIAGRAM

Company: TOM BROWN INC.
 Lease Name: LISBON (MISS) UNIT
 Lease Number: D-616
 Location: NENE Sec 16 T30S R24E
 County: SAN JUAN
 Date: #####

CONFIDENTIAL

Spud Date 4/10/60



KB * 6229'

GL 6218'

13 3/8" 48# H-40 @ 435' - Cement w/190 sx Circ to surf

2580' 9 5/8" 36# J-55 @ 2580' - Cement w/125 sx

TOC @ 3245-50 by TS

2 7/8" TBG @ 3500' - Packer set at 3500'

DV TOOL @ 7761'

RBP set @ 8300'

Perfs 8329-34' Mississippians perfs: 8329-8468' (12/3/96)
 Perfs 8345-49'
 Perfs 8358-61'
 Perfs 8363-69'
 Perfs 8381-87'
 Perfs 8393-8410'
 Perf 8329-8468 w/4 spf
 Acidize 8329-8468 w/4000 gals 15% HCL

Perfs 8448-53'

Perfs 8463-68'

CIBP @ 8490' W/10' CMT ON TOP (ETD 8480') 11/96

Perfs 8503-17' w/2 spf (2/73)

Perfs 8548-67', 8569-93' sqz w/160 sxs (5/68)
 Reperf 8580-93', 8596-8601', 8603-8613' (5/68)

Perfs 8623-34', 8638-44', 8653-8661' w/2 spf (11/63)

CIBP @ 8678' w/10' cmt on top (ETD 8,668')

Perfs 8697-8727'

Perfs 8914-40', sqz w/50 sxs

CIBP @ 8960'

Perfs 8967-78'

Perfs 8990-9004, sqz w/50 sxs (8/60)

Perfs 9034-48', sqz w/50 sxs (8/60)

PBTD

TD 9120'

7" 29,26 & 23# N-80 LT&C and Buttress CSG @ 9117'
 Cement w/1st stg. 275 sxs, 2nd stg. 1050 sxs.

RECEIVED

MAR 08 2000

DIVISION OF
 OIL, GAS AND MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SUNDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

Do not use this form for proposals to drill, or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. SL U-09179
2. Name of Operator: Tom Brown, Inc.		6. If Indian, Allote or Tribe Name
3. Address and Telephone No. 555 Seventeenth Street, Suite 1850, Denver, CO 80202		7. If Unit or CA/Agreement Designation Lisbon Unit
4. Location of Well (Footage, T, R, M, or Survey Description) 765' FNL & 1840' FWL, Sec. 15, T30S, R24E		8. Well Name and No. Lisbon Unit B-615
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		9. API Well No. 43-037-15123
TYPE OF SUBMISSION		10. Field and Pool, or Exploratory Area Lisbon
TYPE OF ACTION		11. County or Parish, State San Juan, Utah

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (start/resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Add perforations and acidize</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with the BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, A form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

SEE ATTACHED PROCEDURE AND WELLBORE SCHEMATIC.

RECEIVED

MAY 08 2000

DIVISION OF
OIL, GAS AND MINING

COPY SENT TO OPERATOR
Date: 5-10-00
Initials: CHD

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) Byron R. Gale	Title Operations Engineer
Signature <i>Byron R. Gale</i>	Date 5/4/00

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

**Accepted by the
Utah Division of
Oil, Gas and Mining**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for ny person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*Federal Approval of this
Action Is Necessary*

FOR RECORD ONLY

**Lisbon B-615 Workover Procedure
765' FNL, 1840' FWL, Sec. 15, T30S, R24E
San Juan County, Utah**

Add Leadville Perforations:

1. Notify BLM. Inspect anchors. Set frac tanks for flowback. RU H₂S safety equipment.
2. MIRU workover rig. Hold pre-job safety meeting.
3. Blow down well. Kill well with 2% KCl water.
(Note: Keep casing loaded throughout job to keep well dead and prevent casing collapse. Paradox Salt from 4,340' to 7,994'.)
4. ND tree. NU 7-1/16" 3,000# BOPE. Pressure test backside to 1000# for 30 min.
5. Release seal assembly in Baker model D packer @ 8,296'. PU and TIH w/ 80-32 model CJ pkr milling tool. Mill over model D pkr and TOO H w/ pkr and 2-7/8" 6.5# L-80 EUE 8rd tubing. Prep model R pkr to run back in.
6. RU WL. RIH w/ GR and tag bottom. RIH w/ CIBP and set in 7-5/8", 33.7#, N-80 casing at 8,506'.
7. RIH w/ WRP and set in 7-5/8", 33.7#, N-80 casing at 8,420'.
8. Swab water to minimal FL for BHP. RIH and perforate Mississippian w/ 4 JSPF, 90 deg phasing using 4" debris-less casing guns with 23g charges as follows: (Correlate to Schlumberger Sonic Log run 11/15/60.)

RECEIVED

MAY 08 2000

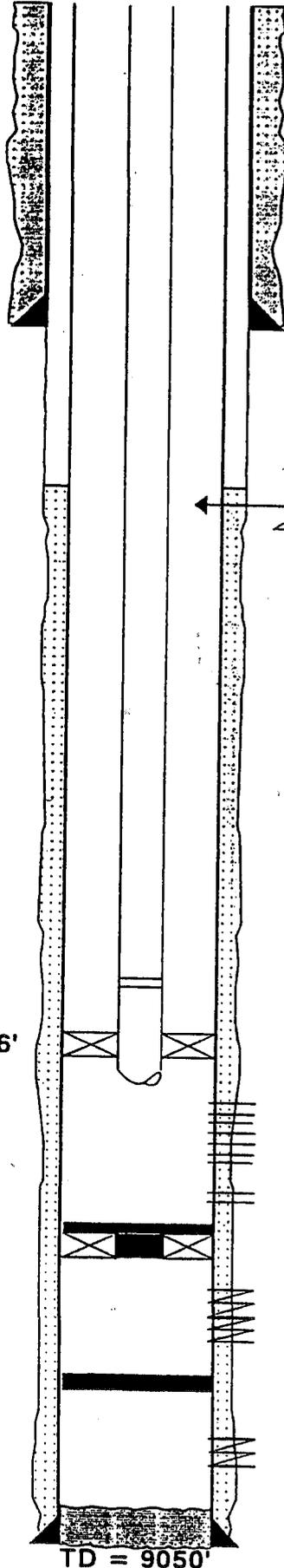
**DIVISION OF
OIL, GAS AND MINING**

8,204' – 8,216'	12'
8,222' – 8,322'	100'
8,340' – 8,362'	22'
8,370' – 8,376'	6'
8,380' – 8,412'	<u>32'</u>
	172'

9. PU and TIH w/ Baker model R-3 DG packer on inspected 2-7/8" tubing. Set packer @ +/- 8,140'.
10. [Optional] RU acid equipment. Open packer bypass, spot 4,000 gal 15% SWIC HCl w/ nitrogen, ball sealers, and additives per attached recommended procedure. Close bypass and breakdown perms. Flush to top of perforations and flow back until load recovered.
11. Flow new perms several days to clean up, monitoring rates and pressures. Return to retrieve WRP.
12. Load backside w/ inhibited packer fluid from surface. Pressure test casing and packer to 1,000#.
13. ND BOPE. NU tree.
14. Swab well in. RTP. RDMO.

WISBON UNIT NO. B-615
 765' FNL, 1840' FWL, SEC.15, T.30S, R.24E
 SAN JUAN COUNTY, UTAH

Spud Date: 09/06/60
 GL Elev: 6294'
 KB Elev: 6306'
 Updated: 05/24/93



13-3/8" 54.5#, J-55 @ 1205'
 Cmt w/ 800 sxs

NOTE: Csg leaks (1387-1473' & 1636-1700')
 Oct 90 w/1000 sxs cmt. Circ 270 sxs.

TUBING DETAIL

5 subs 6.5# L-80 (2',3',6',8',10'), 16 jts L-80
 6.5# tbg, 246 jts 6.5#, J-55, Baker 'F' SN (2.31")
 @ 8263', 1 jt 2-7/8" J-55, Baker Seal Assy
 FHD = 8322' PSA: 8296'

RECEIVED

MAY 08 2000

DIVISION OF
 OIL, GAS AND MINING

Baker Mod D pkr @ 8296'

Model D w/DR plug &
 1 sx cmt. PBTD: 8568'

CIBP @ 8650'

8403-05, 8427-29,
 8438-42, 8446-52,
 8458-74, 8480-90, 4 spf

8510-30, 8561-66

Ouray Perfs
 8784-8803', 4 spf
 Sqz w/ 150 sxs, 2/21/82

McCracken Perfs
 8912-8920', 8941-8951',
 8958-8966', 8952, 8968', 4 spf

7-5/8", 33.7# N-80 @ 9046'
 Cmt w/ 1,300 sxs.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SUNDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

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SUBMIT IN TRIPLICATE

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2. Name of Operator: Tom Brown, Inc.		6. If Indian, Allote or Tribe Name
3. Address and Telephone No. 555 Seventeenth Street, Suite 1850, Denver, CO 80202		7. If Unit or CA/Agreement Designation Lisbon Unit
4. Location of Well (Footage, T, R, M, or Survey Description) 765' FNL & 1840' FWL, Sec. 15, T30S, R24E		8. Well Name and No. Lisbon Unit B-615
		9. API Well No. 43-037-15123
		10. Field and Pool, or Exploratory Area Lisbon
		11. County or Parish, State San Juan, Utah

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (start/resume) <input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Reclamation <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon <u>Add perforations and acidize</u>
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with the BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, A form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

SEE ATTACHED DAILY CHRONOLOGICAL REPORT AND WELLBORE SCHEMATIC.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) Sandy Ocker	Title Engineering Tech
Signature <i>Sandy Ocker</i>	Date 10/2/00

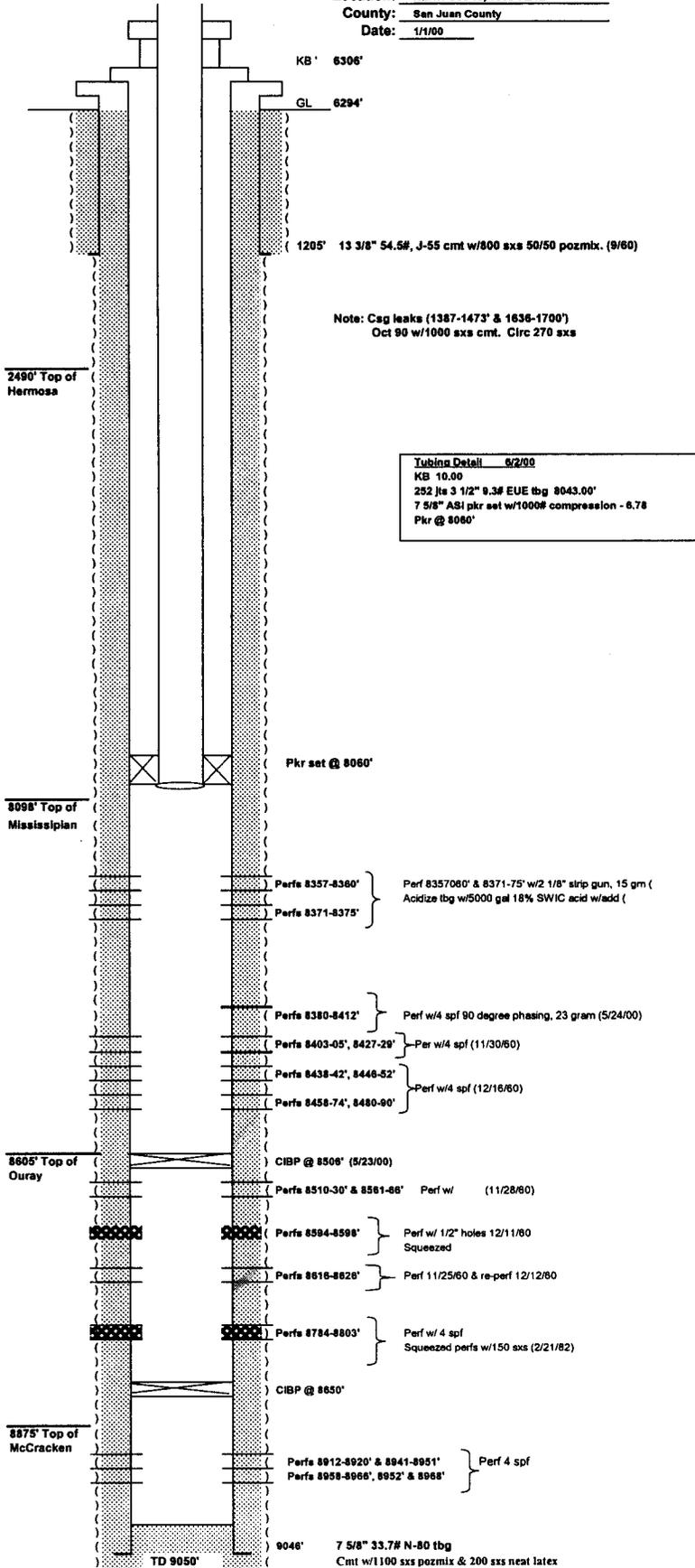
THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

WELLBORE DIAGRAM

Company: TOM BROWN INC.
 Lease Name: Lisbon Unit B-615
 Location: NENW Sec 15, T30S-R24E
 County: San Juan County
 Date: 1/1/80



APPROVED FOR
 SUBMITTED TO
 DATE



Tom Brown, Inc.

555 17th Street, Suite 1850
Denver CO 80202-3918
Phone : (303) 260-5058 Fax : (303) 260-5007

WellWork LOE Report

Well Name : LISBON B 615

WI : NRI 0.8098963

Operator : TOM BROWN, INC.

WorkType : Workover

Loc : NENW

Job Start Date : 5/16/2000

County : SAN JUAN, UT

Rig Co. Name :

Field : LISBON

Co. Supervisor :

API Code : 43-037-15123

STR : 15 - 30S - 24E

Contractor :

Date : 5/16/2000

Days On WellWork: 1

Activity Type : WOCR

Daily Detail : MIRI completion rig, RIH & set plug in model "D" pkr, bleed off press. ND wellhead, NU BOP, release seal assy. Swab 100 BF OOH. POOH w/tbg & seal assy. PU 6 5/8 overshot mill, could not get through spool in wellhead (6 7/16) SDFN.

Date : 5/17/2000

Days On WellWork: 2

Activity Type : WOCR

Daily Detail : PU & RIH w/ 6 3/8 mill, jars & tbg, hit tight spot or ledge on csg @ 1681' +/- . Stage foam @ 5000 + 7500 to unload hole, grt on top of pkr @ 8296' +/- . Mill out on top set of slips in 1 hr 10 min. Workove packing element for 1 1/2 hrs.

Date : 5/18/2000

Days On WellWork: 3

Activity Type : Mill on Pkr.

Daily Detail : Mill over pkr f/5 hrs, made 18 inches. POOH & check mill, 80% worn. RIH w/new mill, jars & tbg to top of pkr. SDFN. NOTE: Tight spot in csg 1681'.

Date : 5/19/2000

Days On WellWork: 4

Activity Type : Mill on Pkr.

Daily Detail : Mill Over pkr, came free lost 35K # on WT indicator. Work pkr up hole trying to get btm slips to grip in csg collar. Pumped 100 bbls fluid finally got pkr to stop @ 8128+/- . Packing elements not allowing gas or fluid to equalize. SDFN.

Date : 5/20/2000

Days On WellWork: 5

Activity Type : Mill on Pkr.

Daily Detail : SICP 400#, SITP 700# Unload hole w/foam unit, mill on pkg. elements. Press on backside 850# on 32/64" ck. Mill over pkg. element & btm set of slips in 3-4 hrs. Push pkr to btm. PU tbg & RIH to 8522'. Kill well w/200 BF. POOH w/tbg & mill, well blowing hard by finish of trip. Pump 60 more BF, change spool on wellhead. Well blowing hard by time spool C/O. SDFN. BLTRW -260

Date : 5/21/2000

Days On WellWork: 6

Activity Type : SDFWE

Daily Detail : SDFWE.

Daily Cost :

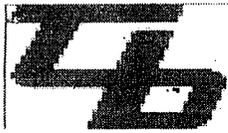
Date : 5/22/2000

Days On WellWork: 7

Activity Type : String mill

Daily Detail : P.O. PU 6 1/2' string mill.

Handwritten notes and stamps in the bottom right corner, including a date stamp "MAY 18 2000" and other illegible markings.



Tom Brown, Inc.

555 17th Street, Suite 1850
Denver CO 80202-3918
Phone: (303) 260-5058 Fax: (303) 260-5007

WellWork LOE Report

Well Name : LISBON B 615

WI : NRI 0.8098963

Operator : TOM BROWN, INC.

WorkType : Workover

Loc : NENW

Job Start Date : 5/16/2000

County : SAN JUAN, UT

Rig Co. Name :

Field : LISBON

Co. Supervisor :

API Code : 43-037-15123

STR : 15 - 30S - 24E

Contractor :

Date : 5/23/2000

Days On WellWork: 8

Activity Type : RIH w/WRP

Daily Detail : Bleed press off well. PU & RIH w/6 1/2" string will, work through spot in csg @ 1681 +/- . RIH to 8500' +/- . POOH w/tbg & m/jill, RU wireliners. RIH & set CIBP @ 8506', RIH & attempt to set WRP, tool shared but did not set. PU tbg & retrieving head, RIH to 8506', latch onto WRP. POOH, SDFN.

Date : 5/24/2000

Days On WellWork: 9

Activity Type : Perforating

Daily Detail : RIH & perf 8380 - 8412, 8370 - 8376, 8340 - 8362, 8222 - 8322, 8204 - 8216, 4 spf 90 degree phasing 23 gram charge. RIH to set WRP, plug did not set, fell to btm. Change out spool in wellhead, PU & RIH w/pkr, plug & retrieving head, latch onto WRP. Set plug @ 8419'+/-. Set pkr @ 8050'+/-. SDFN. Note: FL when starting perf 4900, FL @ end of perf 3450 w/strong blow.

Date : 5/25/2000

Days On WellWork: 10

Activity Type : Swabbing

Daily Detail : SITP - 300# RU & acidize dn. Tbg w/5000 gal 18% SWIC acid w/additives, avg. rate 8.75 BPM, Avg press 1400#. RD Halliburton, RU & swab intial FL @ 5000, made two swab runs. Well kicked off, flowed two hrs through two inch valve. Final press 200#, put on 32/64" ck for 4 hrs. Final press 680#. Fluid recovered 180 bbls SDFN. Prepare well to put on production. BLTRW - 100 FINAL REPORT TILL 5/30/00.

Date : 5/26/2000

Days On WellWork: 11

Activity Type : On Production

Daily Detail : 2- BO, 75-BW. 2641 MCF/PD, 9 hrs flowing, TP- 560, LP- 340 Fuel pot filled up & SI well.

Daily Cost : \$0.00

Cum Cost : \$0.00

Date : 5/27/2000

Days On WellWork: 12

Activity Type : On Production

Daily Detail : 9- BO, 390--BW. 4225 MCF/PD, 23 hrs flowing, TP- 510, LP- 390 Well cut by control room.

Daily Cost : \$0.00

Cum Cost : \$0.00

Date : 5/28/2000

Days On WellWork: 13

Activity Type : On Production

Daily Detail : 8- BO, 73? --BW. 4358 MCF/PD, 24 hrs flowing, TP- 510, LP- 390 Water meter quit working..

Daily Cost : \$0.00

Cum Cost : \$0.00

Date : 5/29/2000

Days On WellWork: 14

Activity Type : On Production

Daily Detail : 8- BO, 192--BW. 4335 MCF/PD, 24 hrs flowing, TP- 510, LP- 410

Daily Cost : \$0.00

Cum Cost : \$0.00

[Faint handwritten notes and stamps]



Tom Brown, Inc.

555 17th Street, Suite 1850
Denver CO 80202-3918
Phone : (303) 260-5058 Fax : (303) 260-5007

WellWork LOE Report

Well Name : LISBON B 615	WI : NRI 0.8098963
Operator : TOM BROWN, INC.	WorkType : Workover
Loc : NENW	Job Start Date : 5/16/2000
County : SAN JUAN, UT	Rig Co. Name :
Field : LISBON	Co. Supervisor :
API Code : 43-037-15123	Contractor :
STR : 15 - 30S - 24E	

Date : 5/30/2000 **Days On WellWork:** 15
Activity Type : SI
Daily Detail : SWI for drlg.

Date : 5/31/2000 **Days On WellWork:** 16
Activity Type : PU tbg
Daily Detail : SITP - 1000, Kill tbg, NU tree, NU BOP. Pump 60 bbls dn. Annulus. Release pkr, RIH, latch onto plug. LD 2 7/8" tbg, RU 3 1/2" equip. SDFN. Well unloaded 3 times, had to pump total 300 bbls to keep dead. BLTRW - 300

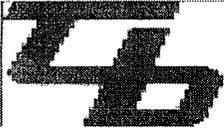
Date : 6/1/2000 **Days On WellWork:** 17
Activity Type : WO Equipment
Daily Detail : SICP- 900#, PU pkr & 3 1/2" tbg. RIH & set pkr, top threads in tbg hanger galled, unset pkr. Pull off tbg hanger & sent to town. SDFD. Note: Pumped 180 bbls to kell well. BLTRW - 480. 4095 MCF/16 hrs, TP 660, LP 385, choke 97%, 0 BO, 300 BW, well turned on @ 3:00 pm 6/1/00.

Date : 6/2/2000 **Days On WellWork:** 18
Activity Type : On Production
Daily Detail : SICP 900#, pump 120 bbls dn. Backside. Pump 40 bbls dn. Tbg, set pkr. ND BOP, NU well head. Load backside & test to 800# f/1 hr., make swab iron kick well off & flow to tank for 30 min. Hook up to sales line & send to plant production strings.
 KB- 10.00,
 252 jts 3 1/2" 9.3# EUE tbg- 8043.00
 7 5/8" ASI pkr set w/1000# compression - 6.78
 Pkr @ 8060
 BLTRW - 650, 5905 MCF/24 hrs, TP 640, LP 450, choke 97%, 0 BO, 408 BW,

Date : 6/3/2000 **Days On WellWork:** 19
Activity Type : On Production
Daily Detail : 5838 MCF/24 hrs, TP 620, LP 440, choke 97%, 0 BO, 309 BW.

Date : 6/4/2000 **Days On WellWork:** 20
Activity Type : On Production
Daily Detail : 5942 MCF/24 hrs, TP 620, LP 440, choke 97%, 0 BO, 298 BW.

Date : 6/5/2000 **Days On WellWork:** 21
Activity Type : On Production
Daily Detail : 6107 MCF/24 hrs, TP 600, LP 438, choke 97%, 5 BO, 287 BW.



Tom Brown, Inc.

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Denver CO 80202-3918
Phone : (303) 260-5058 Fax : (303) 260-5007

WellWork LOE Report

Well Name : LISBON B 615

WI : NRI 0.8098963

Operator : TOM BROWN, INC.

WorkType : Workover

Loc : NENW

Job Start Date : 5/16/2000

County : SAN JUAN, UT

Rig Co. Name :

Field : LISBON

Co. Supervisor :

API Code : 43-037-15123

STR : 15 -30S - 24E

Contractor :

Date : 6/6/2000

Days On WellWork: 22

Activity Type : On Production

Daily Detail : 6204 MCF/24 hrs, TP 600, LP 450, 97% choke, 6 BO, 298 BW.

Date : 6/7/2000

Days On WellWork: 23

Activity Type : On Production

Daily Detail : 6304 MCF/24 hrs, TP 595, LP 450, 97% choke, 7 BO, 290 BW.

Date : 6/8/2000

Days On WellWork: 24

Activity Type : On Production

Daily Detail : 6421 MCF/24 hrs, TP 550, LP 450, 97% choke, 6 BO, 278 BW.

Date : 6/9/2000

Days On WellWork: 25

Activity Type : On Production

Daily Detail : 6175 MCFD, TP 550, LP 450, 97% choke, 24 BO, 281 BW.

Date : 6/10/2000

Days On WellWork: 26

Activity Type : On Production

Daily Detail : 6481 MCFD, TP 550, LP 450, 97% choke 24 BO, 281 BW.

Date : 6/11/2000

Days On WellWork: 27

Activity Type : On Production

Daily Detail : 6490 MCFD, TP 550, LP 450, 97% choke, 24 BO, 271 BW. FINAL REPORT.

[Faint, illegible text]

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

COPY

FORM APPROVED
OMB NO. 1004-0137
Expires: November 30, 2000

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

5. Lease Serial No. SL U-09179

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. Lisbon Unit

8. Lease Name and Well No. Lisbon Unit B-615

9. API Well No. 43-037-15123

10. Field and Pool, or Exploratory Lisbon

11. Sec., T., R., M., on Block and Survey or Area Sec 15, T30S-R24E

12. County/Parish San Juan County

13. State Utah

1a. Type of Well: Oil Well Gas Well **X** Dry Other: _____

1b. Type of Completion: New Well **Workover** Deepen Plug Back Diff. Resrv. Other: _____

2. Name of Operator Sandy Ocker
Tom Brown, Inc. 303-260-5011

3. Address 555 Seventeenth Street, Suite 1850, Denver, Colorado 80202-3918

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At Surface 765' FNL & 1840' FWL, NENW Sec 15, T30S-R24E
At top prod. interval reported below
At total depth SAME

14. Date Spudded 9/6/1960

15. Date T.D. Reached 12/19/60

16. Date Completed. (prod) **6-11-00**
 D&A Ready to Prod.

17. Elevations (DF, RKB, RT, GL) *
GL 6294' KB 6306'

18. Total Depth: MC MD TVD 9050'

19. Plug Back T.D.: MD 8568'

20. Depth Bridge Plug Set: MD CIBP @ 8650' & CIBP @ 8506'

21. Type Electric & Other Mechanical Logs Run (Submit Copy of each)

22. Was Well Cored? No Yes (Submit analysis)
Was DST run? No Yes (Submit report)
Directional Survey? No Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks & Type of Cement	Slurry vol. (BBL)	Cement Top*	Amount Pulled
	13 3/8" J-55	54.5#	Surface	1205'		800 sxs common			
	7 5/8" N-80	33.7#	Surface	9046'		1100 sxs 50/50 pozmix 200 sxs neat latex			
	Cut circular notches @ 8916', 8952', 8968'								

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
3 1/2" 9.3#	8060'	8060'	7 5/8" ASI					

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf Status
A) Mississippian	8098'	8605'	8380-8412', 8370-76, 8340-62', 8222-8322', 8204-16'	4 spf		open
			8357-8360', 8371-8275'	15 gm		open
			8403-05', 8427-29', 8438-42', 8446-52', 8458-74', 8480-90'	4spf		open
			8594-8598'	1/2" holes		squeezed
B) Ouray	8605'	8875'	8616-26', 8784-8803'		4 spf	below CIBP @ 8506' open, * squeezed
C) McCracken	8875'	8974'	8912-20', 8941-51', 8958-66', 8952, 8968'		4 spf	below CIBP @ 8650' open

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
	SEE WELLBORE DIAGRAM

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28. Production - Interval A

Date First Prod	Test Date	Hours Tested	Test Production	Oil (BBL)	Gas (MCF)	Water (BBL)	Oil Gravity Corr. API	Gas Gravity	Production Method
	6/10/00	24		24	6481	281			flowing
Choke Size	Tbg Press. Flwg./ St	Csg Press.	24 Hr. Rate	Oil (BBL)	Gas (MCF)	Water (BBL)	Gas:Oil Ratio	Well Status	
	550	450		24	6481	281			producing

28a. Productin - Interval B

Date First Prod	Test Date	Hours Tested	Test Production	Oil (BBL)	Gas (MCF)	Water (BBL)	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg Press. Flwg./ St	Csg Press.	24 Hr. Rate	Oil (BBL)	Gas (MCF)	Water (BBL)	Gas:Oil Ratio	Well Status	

28b. Production - Interval C

Date First Prod	Test Date	Hours Tested	Test Production	Oil (BBL)	Gas (MCF)	Water (BBL)	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg Press. Flwg./ St	Csg Press.	24 Hr. Rate	Oil (BBL)	Gas (MCF)	Water (BBL)	Gas:Oil Ratio	Well Status	

28c. Production - Interval D

Date First Prod	Test Date	Hours Tested	Test Production	Oil (BBL)	Gas (MCF)	Water (BBL)	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg Press. Flwg./ St	Csg Press.	24 Hr. Rate	Oil (BBL)	Gas (MCF)	Water (BBL)	Gas:Oil Ratio	Well Status	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top	
					Meas. Depth	
				Hermosa	2490'	(+3817)
				Paradox "A"	4000'	(+2307)
				Salt Top	4350'	(+1957)
				Mississippian	8098'	(-1791)
				Ouray	8605'	(-2298)
				Top of McCracken	8875'	(-2568)
				Base of McCracken	8974'	(-2667)

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

- 1. Electrical/Mechanical Logs (1 full set req'd.)
- 2. Geologic Report
- 3. DST Report
- 4. Directional Survey
- 5. Sundry Notice for plugging and cement verification
- 6. Core Analysis
- 7. Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Sandy Ocker Title Engineering Tech

Signature *Sandy Ocker* Date 09/12/00

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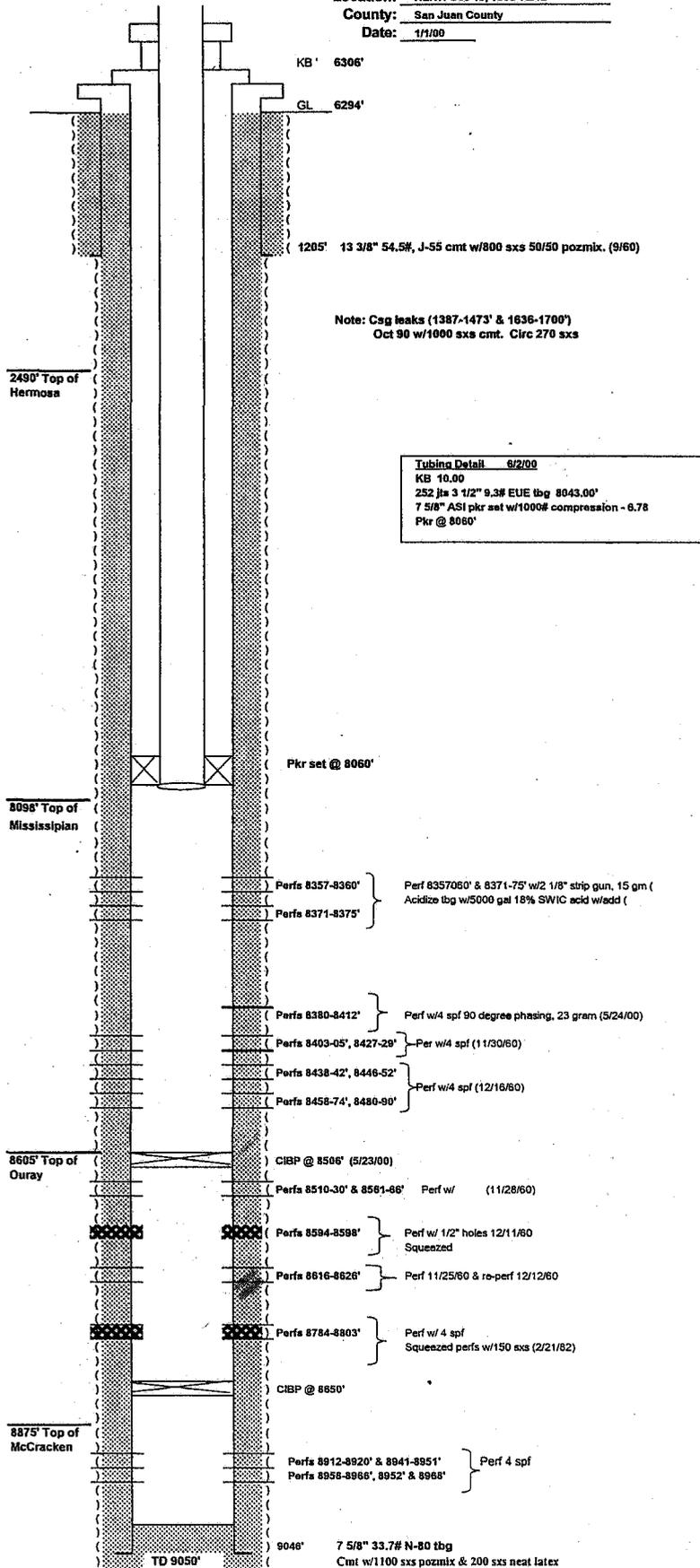
**DIVISION OF
OIL, GAS AND MINING**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

WELLBORE DIAGRAM

Company: TOM BROWN INC.
 Lease Name: Libon Unit B-615
 Location: NENW Sec 15, T30S-R24E
 County: San Juan County
 Date: 1/1/00



Tubing Detail 6/2/00
 KB 10.00
 252 Jts 3 1/2" 9.3# EUE tbg 8043.00'
 7 5/8" ASI pkr set w/1000# compression - 6.78
 Pkr @ 8060'

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill, or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUBMIT IN TRIPLICATE

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. SL U-09179
2. Name of Operator: Tom Brown, Inc.		6. If Indian, Allote or Tribe Name N/A
3. Address and Telephone No. 555 Seventeenth Street, Suite 1850, Denver, CO 80202		7. If Unit or CA/Agreement Designation Lisbon Unit
4. Location of Well (Footage, T, R, M, or Survey Description) 765' FNL & 1840' FWL, Sec. 15, T30S, R24E		8. Well Name and No. Lisbon Unit B-615
		9. API Well No. 43-037-15123
		10. Field and Pool, or Exploratory Area Lisbon
		11. County or Parish, State San Juan, Utah

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (start/resume) <input checked="" type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Reclamation <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with the BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

From 4/19 - 5/2/2002 Tom Brown, Inc. performed the following procedure to shut off water production from this well:
Pumped fresh water down tubing, released packer at 8124'.
Set cement retainer at 8334'.
Cement squeezed perfs from 8312-8340' w/ 100 sx 50/50 Poz + additives. TOC @ 8160'. Drill out cement.
Perforated from 8222-8300', 8204-8216', 8154-8160', 8124-8142', 4" holes, 4 spf, 23 gr (456 holes).
Broke down perfs from 8124-8322' with 7500 gals 15% swic acid and 240 1.3 ball sealers.
RIH w/ new 7-5/8" Team set 1-x packer. Landed w/ 10,000# compression in tubing hanger.
Ran 3-1/2" J-55 tubing w/ end of tubing at 8084.94'.

(Chronological history reports are attached to this sundry notice.)

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**DIVISION OF
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14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) Christine Mathewson	Title Engineering Technician
Signature <i>Christine Mathewson</i>	Date 8/12/2002

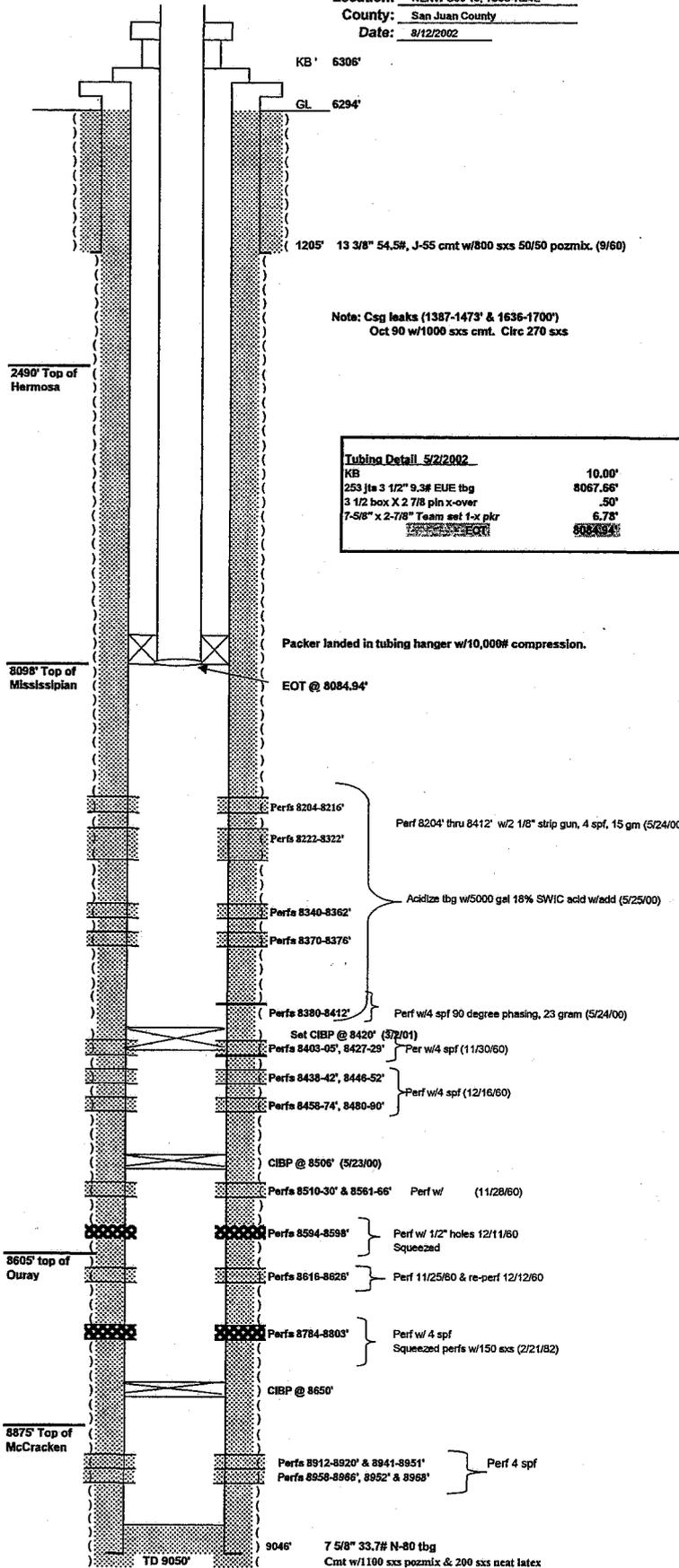
THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

WELLBORE DIAGRAM

Company: TOM BROWN INC.
 Lease Name: Lisbon Unit B-815
 Location: NENW Sec 15, T30S-R24E
 County: San Juan County
 Date: 8/12/2002



Tubing Detail 5/2/2002	
KB	10.00'
253 Jts 3 1/2" 9.3# EUE tbg	8067.66'
3 1/2 box X 2 7/8 pln x-over	.50'
7-5/8" x 2-7/8" Team and 1-x plr	6.78'
	6024.94'

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DIVISION OF OIL GAS AND MINING



Tom Brown, Inc.

555 Seventeenth Street, Suite 1850
Denver, CO 80202-3918
(303) 260-5000

Lisbon B 615

Completion Chronological Report

Page 1 of 5

Well Name : Lisbon B 615

Well User ID : 272681

AFE # : C02U124

Operator : Tom Brown, Inc.

WI : 0.995031 NRI : 0.848352

Loc : NENW

STR : 15 -30S - 24E

County : San Juan, Ut

APICode : 043-037-15123

Prospect : Lisbon

Contractor :

AFE Type : Workover

Spud Date : 9/6/1960

Rig Rel Date : 12/19/1960

Total Depth : 9050 ft.

Comp Date : 3/7/1961

PBTD : 8420 ft.

Job Purpose : Shut off bottom water to eliminate 86% of the produced water from this well.

Completions Detail Report

Date : 4/19/2002

Activity : SDFWE

Days On Completion : 1

Rpt Summary : Rig up service rig and spot in equipment.

Report Detail : Move in Monument well service fro Andys Mesa 23 and R/U. Spot in rig pump and tank, blow down tank, and water tank. Hook up flow back tank. SDFWE

Date : 4/23/2002

Activity : Squeeze

Days On Completion : 5

Rpt Summary : POOH with packer, Set wireline cement retainer at 8334', RIH with 50 stands 3 1/2" tubing and stinger.

Report Detail : Take well off production. Saffety meeting and rig crew got re-certified for h2s. R/U pump and fill casing 18 bbls, test casing to 1000 psi. for 20 minutes. OK. Pump 100 bbls fresh water down tubing. N/D tree, N/U BOPS. Release packer at 8124'. P/U 8 jts. 3 1/2" tubing and RIH to 8343'. POOH with packer. Had trouble breaking connections. Pumped 50 bbls down tubing half way out of hole. R/U Schlumberger and RIH with STA 7 5/8" cement retainer and set at 8334'. R/D Schlumberger. P/U stinger and star guide and RIH on 3 1/2" tubing 50 stands. CWI SDFN

Date : 4/24/2002

Activity : Tag Plug

Days On Completion : 6

Rpt Summary : Cement Squeeze perfs at 8340-8312

Report Detail : SICP: 50
SITP: 50

Pump 50 bbls down tubing, finish RIH and tag cement retainer @ 8334' Sting into retainer and wait on Halliburton cement crew out of Farmington for 3 hours. Was told that there was communication breakdown between Supervisor and dispatch and that crew was never called out. Halliburton paid for 3 hours rig time and 3 hours water truck time. R/U Halco at noon. Held safety meeting. Test pump and lines to 4000 psi. Pump 75 bbls water to get injection rate at 4 bbl/min @ 40 psi. Start rig pump and start pumping down casing with fresh water at 2 1/2 bbl/min. Cannot circ well and fluid level stays at 5000'. Start squeeze. Pump 10 bbl fresh water, 100 sacks 50/50 poz. 2% gel, 2% halad 344, .2% cfr-3 Mixed at 13.6#/gal. 22.5 bbls cement slurry. When cement was on perf Psi came up to 900 psi and broke back to 700 psi . Pressure started climbing after 5 bbls cement in perfs. Pressure came up to 4000 psi. Shut down with 57 bbls displaced. Pressure bled off to 2000 psi in 1 minute. Pump 1 bbl. Pressure went up to 4000 psi. 58 bbls displaced, out of 72.5. Pressure bled off to 2800 psi and stayed there for 4 minutes. Bleed pressure off to 600 psi and sting out of retainer with 14 bbls cement in tubing. Increase rate on rig pump down casing to 4 bbl/min. no psi. Break off Halco and POOH 40 stands. Shut rig pump down half way out. Had pumped 240 bbls down casing and didn't see any psi. Tubing pulled dry. R/U pump and pump down tubing 60 bbls. 8 bbls cement in perfs. CWI. SDFN

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**DIVISION OF
OIL, GAS AND MINING**



Tom Brown, Inc.

555 Seventeenth Street, Suite 1850
Denver CO 80202-3918
Phone : (303) 260-5000 Fax : (303) 260-5007

Completion Chron Report

Lisbon B 615

Completion Chronological Report

Page 2 of 5

Well Name : Lisbon B 615

Well User ID : 272681

AFE # : C02U124

Operator : Tom Brown, Inc.

WI : 0.995031 NRI : 0.848352

Loc : NENW

STR : 15 -30S - 24E

County : San Juan, Ut

APICode : 043-037-15123

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Prospect : Lisbon

Contractor :

AFE Type : Workover

AUG 19 2002

Spud Date : 9/6/1960

Rig Rel Date : 12/19/1960

Total Depth : 9050 ft.

DIVISION OF

Comp Date : 3/7/1961

PBTD : 8420 ft.

OIL, GAS AND MINING

Date : 4/25/2002

Activity : Drill out cement.

Days On Completion : 7

Rpt Summary : Tag top of cement and RIH with bit and scraper.

Report Detail : SICP: 0

SITP: 0

RIH with 40 stands 3 1/2" tubing. Tag top of cement at 8160'. Top perf at 8204'. 7 bbls cement above retainer, out of 14 bbls that was in tubing when we stung out of retainer. POOH with tubing and stinger. P/U 7 5/8" casing scraper and 6 5/8" Bit. Rih on 3 1/2" tubing to 6000' SDFN

Date : 4/26/2002

Activity : Drill out cement.

Days On Completion : 8

Rpt Summary : Drilled out cement from 8140' to 8204'

Report Detail : Finish RIH and tag cement at 8140'. R/U power swivel and start drilling. 1st 15' just stringers. Hard cement at 8155' Drilling rubber gave out and rig didn't have extra Washington head rubber. Had to call R&W in Grand Junction and get some brought to location. Wait 3 hours. Put in new rubber and start drilling, having trouble reverse circulating, bit is plugging up. Washington head rubber gave out again after 15 minutes. Shut down and have rig get rig over hole. Put in new rubber and start drilling. Couldn't reverse circ so pumped down tubing and drilled to 8204'. Circ hole clean for 1 1/2 hours. R/D power swivel and start out of hole. Pusher forgot to open pipe rams and pulled collar into rams and top collar in elevators pulled off. Caught tubing in slips. CWI SDFN.

Date : 4/27/2002

Activity : Drill out cement.

Days On Completion : 9

Rpt Summary : POOH with bit and change out and RIH

Report Detail : P/U 3 1/2" spear and latch into top of 3 1/2" tubing and pull jt. Up hole to next collar. Lay down joint and spear. POOH with tubing and scraper and Bit. Lay down Bit, P/U new Bit and RIH. Tag Cement at 8204' R/U power swivel. Making up 1st. Jt threads on swivel got galded. Took 1 hour to get sub broke off swivel. Picked up new sub but threads were galded on it to. Will have two new subs on location 1st. thing in am. CWI SDFN

Date : 4/28/2002

Activity : Perforate

Days On Completion : 10

Rpt Summary : Drill out cement from 8204-8308' test casing to 1000 psi OK POOH

Report Detail : Drill out cement from 8204' to 8308'. 4 hours. Circ well for 1 hour. Test casing to 1000 psi for 10 minutes, OK. R/D power swivel and POOH with Bit and scraper. CWI SDFN.

Date : 4/29/2002

Activity : Acidizing

Days On Completion : 11

Rpt Summary : Perforate and run packer, packer wouldn't set, POOH with all but 10 stands.

Report Detail : R/U Schlumberger wireline and Perforate 8222-8300', 8204-8216', 8154-8160', 8124-8142', using 4" expendable guns, 4 spf, 23 gram charges, 90 phasing 456 holes. Note: Fluid level when starting was at 650', when finished it was at 675'. P/U 7 5/8" Team set 1-x packer and RIH. Set packer at 8080'. Packer set good but slid up hole 2' when pulling tension into it to pack it off. Release packer and pull up 1 jt to 8050'. Had trouble getting packer to set. {30 min.} Packer set and put 35,000# down and pulled 20,000# tension. Hooked up rig pump to break down perfs, took 4 bbls to fill tubing and pressure came up to 1000 psi and immediately broke back to 0 and casing started to blow. Packer was still set. Release packer and POOH 10 stands. Hook up rig pump and circ for 10 min. and set packer. Packer would take weight going down but we couldn't pull into it. Set 30,000# down and hook up to casing to test. No test, as soon as casing got 200 psi packer came free and well circulated. POOH with packer to see what is wrong. Left 10 stands in hole because of darkness, will finish POOH in morning.



Tom Brown, Inc.

555 Seventeenth Street, Suite 1850
Denver CO 80202-3918
Phone: (303) 260-5000 Fax: (303) 260-5007

Completion Chron Report

Well Name : Lisbon B 615

Well User ID : 272681

AFE # : C02U124

Operator : Tom Brown, Inc.

WI : 0.995031 NRI : 0.848352

Loc : NENW

STR : 15 -30S - 24E

County : San Juan, Ut

APICode : 043-037-15123

RECEIVED

Prospect : Lisbon

Contractor :

AFE Type : Workover

AUG 19 2002

Spud Date : 9/6/1960

Rig Rel Date : 12/19/1960

Total Depth : 9050 ft.

DIVISION OF

Comp Date : 3/7/1961

PBDT : 8420 ft.

OIL, GAS AND MINING

Date : 4/30/2002

Activity : Acidizing

Days On Completion : 12

Rpt Summary : Breakdown perfs 8124-8322' with 7500 gal. 15% swic acid

Report Detail : SICP: 0

P/U new 7 5/8" Team set 1-x packer and RIH Took 2000# to get thru tight spot at 1671'. Ran to 1800' and set packer to make sure it didn't get damaged. Packer set and released fine. Finish RIH set packer at 8112'. R/U rig pump and test casing to 700 psi ok. Hook up to tubing and pump 4 bbls fresh to fill tubing. Breakdown perfs at 2 bbl/min at 2000 psi. Pump 4 bbls into perfs. R/U swab equipment and swab tubing down to 5000'. R/U Halliburton. Hold safety meeting. Pump 7500 gal. 15% swic acid with 240 1.3 ball sealers. Avg Rate: 4.03 bbl/min. Avg Psi: 430 Had to shut down half way thru job to fix flow meter. When we started back up Max rate was 6.5 bbl/min. at 57 psi. Isip: 0. Didn't see any ball action at all. R/D Halliburton. Tubing on massive vacume. Release packer and pull 1 jt. Set packer with 15,000# compression and land in tubing hanger. N/D BOPS. N/U tree. R/U swab and RIH Tag fluid level at 5000'. Made one swab run and shut down for night.

Date : 5/1/2002

Activity : Flow back Acid

Days On Completion : 13

Rpt Summary : Made 16 swab runs, tubing flowing at 50 psi. Recovered 120 bbls

Report Detail : SITP: 400 psi

SICP: 0

Blow tubing down. RIH with swab, tag fluid level at 4000'. Made 16 swab runs, Tubing flowing. Flow tubing on 2" line at 30 psi. After 2 1/2 hours FTP was 50 psi. CWI Recovered 120 bbls. BLTRW: 240 bbls

Date : 5/2/2002

Activity : Final Report

Days On Completion : 14

Rpt Summary : Final report

Report Detail : SITP: 800 psi. FINAL REPORT

SICP: 0

Open tubing up and flow to tank. Fill casing with packer fluid and test casing to 800 psi ok. R/D MWS and move to Lisbon B-84. Tubing flowing at 120 psi. 2" line. Recovered 240 bbls as of noon. BLTRW 110

KB

10.00

253 jts. 3 1/2" J-55 tubing

8067.66

3 1/2" box X 2 7/8" pin:

.50

7 5/8" x 2 7/8" Team set 1-x packer

6.78

EOT

8084.94

Packer landed with 10,000# compression. And landed in tubing hanger.

Date : 5/3/2002

Activity : Well Test

Days On Completion : 15

Rpt Summary : 10 DAY WELL TEST

Report Detail : LP - 190 TP - 420 CP - 24 MCF/D - 2500 CHOKE - 1 - 50% BO - 1 BW - 104



Tom Brown, Inc.

555 Seventeenth Street, Suite 1850
Denver CO 80202-3918
Phone: (303) 260-5000 Fax: (303) 260-5007

Completion Chron Report

Lisbon B 615 Completion Chronological Report Page 4 of 5

Well Name : Lisbon B 615

AFE # : C02U124

Well User ID : 272681

WI : 0.995031 NRI : 0.848352

Operator : Tom Brown, Inc.

Loc : NENW

STR : 15 -30S - 24E

County : San Juan, Ut

APICode : 043-037-15123

RECEIVED

AUG 19 2002

DIVISION OF
OIL, GAS AND MINING

Prospect : Lisbon

Contractor :

AFE Type : Workover

Spud Date : 9/6/1960

Rig Rel Date : 12/19/1960

Total Depth : 9050 ft.

Comp Date : 3/7/1961

PBTD : 8420 ft.

Date : 5/4/2002 Activity : Well Test Days On Completion : 16

Rpt Summary : 10 DAY WELL TEST

Report Detail : LP - 185 TP - 260 CP - 24 MCF/D - 2906 CHOKE - 100 BO - 2 BW - 128

Date : 5/5/2002 Activity : Well Test Days On Completion : 17

Rpt Summary : 10 DAY WELL TEST

Report Detail : LP - 195 TP - 280 CP - 0 MCF/D - 2818 CHOKE - 100 BO - 1 BW - 116

Date : 5/6/2002 Activity : Well Test Days On Completion : 18

Rpt Summary : 10 DAY WELL TEST

Report Detail : LP - 200 TP - 260 CP - 0 MCF/D - 2697 CHOKE - 100 BO - 1 BW - 107

Date : 5/7/2002 Activity : Well Test Days On Completion : 19

Rpt Summary : 10 DAY WELL TEST

Report Detail : LP - 175 TP - 260 CP - 0 MCF/D - 2589 CHOKE - 100 BO - 1 BW - 109

Date : 5/8/2002 Activity : Well Test Days On Completion : 20

Rpt Summary : 10 DAY WELLTEST

Report Detail : LP - 190 TP - 260 CP - 0 MCF/D - 2525 CHOKE - 100 BO - 1 BW - 109

Date : 5/9/2002 Activity : Well Test Days On Completion : 21

Rpt Summary : 10 DAY WELL TEST

Report Detail : LP - 192 TP - 262 CP - 0 MCF/D - 2495 CHOKE - 100 BO - 1 BW - 113

Date : 5/10/2002 Activity : Well Test Days On Completion : 22

Rpt Summary : 10 DAY WELL TEST

Report Detail : LP - 190 TP - 260 CP - 0 MCF/D - 2487 CHOKE - 100 BO - 1 BW - 114

Date : 5/11/2002 Activity : Well Test Days On Completion : 23

Rpt Summary : 10 DAY WELL TEST

Report Detail : LP - 188 TP - 262 CP - 0 MCF/D - 2468 CHOKE - 100 BO - 1 BW - 117

Date : 5/12/2002 Activity : Final Report Days On Completion : 24

Rpt Summary : FINAL REPORT

Report Detail : LP - 187 TP - 260 CP - 0 MCF/D - 2439 CHOKE - 100 BO - 1 BW - 119

Casing

DateIn	Setting Depth	Jts Run	Type	Size	Weight	Grade	MINID	HoleDiam	TD
9/15/1960	1205	0	2. Surface	13.375	54.5	J-55		0	1205

tom brown to encana.xls

well name	sec	twsp	rng	api	entity	lease	well	stat	flag	unit name	lease num	qtr	qtr	td	md	d	apd	op no
BIG INDIAN 36-42	36	290S	240E	4303731827		State	GW	APD			ST-UT-37067	SESW				5750		N9885
FEDERAL 14-18	18	250S	060E	4301530060	436	Federal	NA	PA			UTU-69447	SWSW						N9885
NW USA D-1 (B-624)	24	300S	240E	4303716516	99990	Federal	WD	A			UTU-070034	NENW						N9885
FEDERAL 15-25	25	290S	230E	4303730317	4776	Federal	GW	S			UTU-986	SWSE						N9885
BIG INDIAN 35-24	35	290S	240E	4303731829	14409	Federal	GW	DRL	C		UTU-077077	SENE						N9885
BIG INDIAN 27-34	27	290S	240E	4303731828		Federal	GW	APD	C		N9885							
BIG INDIAN UNIT 1	33	290S	240E	4303716219	8122	Federal	OW	S		BIG INDIAN	UTSL-067131	SENE						N9885
BIG INDIAN 4	14	300S	250E	4303716221	8124	Federal	GW	TA		BIG INDIAN	UTSL-089097	SWSW						N9885
BIG INDIAN 34-11	34	290S	240E	4303731818	14004	Federal	D	PA	C	BIG INDIAN	UTU-014905	NWNW						N9885
BULL HORN U 10-43	10	300S	250E	4303731831	14393	Federal	GW	DRL	C	BULL HORN	UT-73190	SWSE						N9885
LISBON B-615	15	300S	240E	4303715123	8123	Federal	OW	P		LISBON	UTU-09179	NENW						N9885
LISBON FED 2-21F	21	300S	250E	4303715768	410	Federal	GW	S		LISBON	UTU-094674	SENE						N9885
LISBON B912	12	300S	240E	4303715769	8123	Federal	OW	S		LISBON	UTU-06922	SESW						N9885
LISBON A-713A	13	300S	240E	4303716236	8123	Federal	GW	PA		LISBON	UTSL-070034	SWNW						N9885
LISBON A-715	15	300S	240E	4303716237	8123	Federal	WD	A		LISBON	UTU-020691A	SWNW						N9885
LISBON B-613	13	300S	240E	4303716240	8123	Federal	OW	S		LISBON	UTSL-070034	NENW						N9885
LISBON C-69	09	300S	240E	4303716245	8123	Federal	OW	S		LISBON	UTU-09179	NWNE						N9885
LISBON C-94	04	300S	240E	4303716247	8123	Federal	OW	S		LISBON	UTU-66582	SWSE						N9885
LISBON UNIT D-84	04	300S	240E	4303716250	8123	Federal	OW	P		LISBON	UTU-015445	NESE						N9885
LISBON D-89	09	300S	240E	4303716251	8123	Federal	OW	P		LISBON	UTU-015445	NESE						N9885
NW LISBON USA B-1 (B-614)	14	300S	240E	4303716468	8123	Federal	OW	P		LISBON	UTSL-070008A	NENW						N9885
NW LISBON USA A-2 (D-810)	10	300S	240E	4303716471	8123	Federal	GW	P		LISBON	UTU-14903	NESE						N9885
LISBON B-84	04	300S	240E	4303730054	8123	Federal	OW	S		LISBON	UTU-09179	NESW						N9885
LISBON B-814	14	300S	240E	4303730082	8123	Federal	OW	S		LISBON	UTSL-070008A	NESW						N9885
LISBON C-99	09	300S	240E	4303730693	8123	Federal	OW	P		LISBON	UTU-09179	SWSE						N9885
LISBON B-94	04	300S	240E	4303730695	8123	Federal	OW	S		LISBON	UTU-015445	SESW						N9885
LISBON C-910 I	10	300S	240E	4303731805	12892	Federal	D	PA		LISBON	UTU-0141903	SWSE						N9885
LISBON D-616	16	300S	240E	4303715049	8123	State	OW	P		LISBON	ML-13692	NENE	9120	9120				N9885
LISBON B-616	16	300S	240E	4303716242	8123	State	OW	S		LISBON	ML-8366	NESW	8689	8689				N9885
BELCO ST 4 (LISBON B-816)	16	300S	240E	4303716244	8123	State	WD	A		LISBON	ML-8366	NESW	8730	9100				N9885
LISBON UNIT D-716	16	300S	240E	4303731034	8123	State	OW	P		LISBON	ML-13692	SENE	8794	8775				N9885
LISBON U B-610	10	300S	240E	4303716469	8123	Federal	OW	P		LISBON (MCCRACKEN)	UTU-014903	NENW						N9885
LISBON U B-610	10	300S	240E	4303716469	9740	Federal	OW	P		LISBON (MCCRACKEN)	UTU-014903	NENW						N9885
LISBON U D-610	10	300S	240E	4303730694	9740	Federal	GW	P		LISBON (MCCRACKEN)	UTU-014903	NENE						N9885
LISBON UNIT A-911	11	300S	240E	4303731014	9740	Federal	GW	P		LISBON (MCCRACKEN)	UTSL-070008A	SWSW						N9885
LISBON C-910	10	300S	240E	4303731323	9740	Federal	OW	P		LISBON (MCCRACKEN)	UTU-014903	SWSE						N9885
LISBON B-614A	14	300S	240E	4303731351	9740	Federal	OW	TA		LISBON (MCCRACKEN)	UTSL-070008A	NENW						N9885
LISBON B-810	10	300S	240E	4303731433	9740	Federal	OW	P		LISBON (MCCRACKEN)	UTU-014903	NESW						N9885
LISBON (MCCRACKEN) D-615	15	300S	240E	4303731817		Federal	OW	LA		LISBON (MCCRACKEN)	N9885							
LISBON (MCCRACKEN) A-610	10	300S	240E	4303731821		Federal	OW	LA		LISBON (MCCRACKEN)	N9885							

Delaware

PAGE 1

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"TBI PIPELINE COMPANY", A DELAWARE CORPORATION,

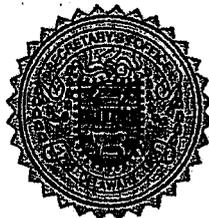
"TBI WEST VIRGINIA, INC.", A DELAWARE CORPORATION,

"TOM BROWN, INC.", A DELAWARE CORPORATION,

WITH AND INTO "ENCANA OIL & GAS (USA) INC." UNDER THE NAME OF "ENCANA OIL & GAS (USA) INC.", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-SECOND DAY OF DECEMBER, A.D. 2004, AT 6:15 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF MERGER IS THE FIRST DAY OF JANUARY, A.D. 2005.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



2137895 8100M

040934710

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

AUTHENTICATION: 3584585

DATE: 12-29-04

State of Delaware
Secretary of State
Division of Corporations
Delivered 06:15 PM 12/22/2004
FILED 06:15 PM 12/22/2004
SRV 040934710 - 2137895 FILE

**STATE OF DELAWARE
CERTIFICATE OF MERGER OF
DOMESTIC CORPORATIONS**

Pursuant to Title 8, Section 251(c) of the Delaware General Corporation Law, the undersigned corporation executed the following Certificate of Merger:

FIRST: The name of the surviving corporation is EnCana Oil & Gas (USA) Inc., and the names and jurisdictions of the corporations being merged into this surviving corporation are as follows:

<u>Name</u>	<u>Jurisdiction of Incorporation</u>
Tom Brown, Inc.	Delaware corporation
TBI Pipeline Company	Delaware corporation
TBI West Virginia, Inc.	Delaware corporation

SECOND: The Agreement and Plan of Merger has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations.

THIRD: The name of the surviving corporation is EnCana Oil & Gas (USA) Inc., a Delaware corporation.

FOURTH: The Certificate of Incorporation of the surviving corporation shall be its Certificate of Incorporation.

FIFTH: The merger is to become effective on January 1, 2005.

SIXTH: The Agreement and Plan of Merger is on file at 950 17th Street, Suite 2600, Denver, Colorado 80202, the place of business of the surviving corporation.

SEVENTH: A copy of the Agreement and Plan of Merger will be furnished by the surviving corporation on request, without cost, to any stockholder of the constituent corporations.

IN WITNESS WHEREOF, said surviving corporation has caused this certificate to be signed by an authorized officer, the 17th day of December, A.D., 2004.

ENCANA OIL & GAS (USA) INC.

By: 
Mary A. Viviano, Secretary

OPERATOR CHANGE WORKSHEET

ROUTING

1. GLH
2. CDW
3. FILE

Change of Operator (Well Sold)

Designation of Agent/Operator

X Change of Name

Merger

The operator of the well(s) listed below has changed, effective: 1/1/2005

FROM: (Old Operator): N9885-Tom Brown, Inc. 555 17th St, Suite 1850 Denver, CO 80202 Phone: 1-(720) 876-5157	TO: (New Operator): N2175-EnCana Oil & Gas (USA) Inc. 370 17th St, Suite 1700 Denver, CO 80202 Phone: 1-(720) 876-5068
---	--

CA No.		Unit:		LISBON				
WELL(S)								
NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
LISBON C-94	04	300S	240E	4303716247	8123	Federal	OW	S
LISBON UNIT D-84	04	300S	240E	4303716250	8123	Federal	OW	P
LISBON B-84	04	300S	240E	4303730054	8123	Federal	OW	S
LISBON B-94	04	300S	240E	4303730695	8123	Federal	OW	S
LISBON C-69	09	300S	240E	4303716245	8123	Federal	OW	S
LISBON D-89	09	300S	240E	4303716251	8123	Federal	OW	P
LISBON C-99	09	300S	240E	4303730693	8123	Federal	OW	P
NW LISBON USA A-2 (D-810)	10	300S	240E	4303716471	8123	Federal	GW	P
LISBON C-910 I	10	300S	240E	4303731805	12892	Federal	D	PA
LISBON B912	12	300S	240E	4303715769	8123	Federal	OW	S
LISBON A-713A	13	300S	240E	4303716236	8123	Federal	GW	PA
LISBON B-613	13	300S	240E	4303716240	8123	Federal	OW	S
NW LISBON USA B-1 (B-614)	14	300S	240E	4303716468	8123	Federal	OW	P
LISBON B-814	14	300S	240E	4303730082	8123	Federal	OW	S
LISBON B-615	15	300S	240E	4303715123	8123	Federal	OW	P
LISBON A-715	15	300S	240E	4303716237	8123	Federal	WD	A
NW USA D-1 (B-624)	24	300S	240E	4303716516	99990	Federal	WD	A

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 1/27/2005
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 1/27/2005
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 2/23/2005
- Is the new operator registered in the State of Utah: YES Business Number: 5053175-0143
- If **NO**, the operator was contacted on: _____
- (R649-9-2) Waste Management Plan has been received on: In PLACE
- Inspections of LA PA state/fee well sites complete on: n/a

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM not yet BIA

8. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: n/a

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database** on: 2/24/2005

2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 2/24/2005

3. Bond information entered in RBDMS on: 2/24/2005

4. Fee/State wells attached to bond in RBDMS on: 2/24/2005

5. Injection Projects to new operator in RBDMS on: 2/24/2005

6. Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: UT1005

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: n/a

FEE & STATE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number RLB0007875

2. The **FORMER** operator has requested a release of liability from their bond on: n/a

The Division sent response by letter on: n/a

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS:

Merger and rider of bond from Tom Brown, Inc.

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING
 CDW

X - Change of Operator (Well Sold)

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective:

5/14/2010

FROM: (Old Operator): N2175-EnCana Oil & Gas (USA) Inc. 370 17th Street, Suite 1700 Denver, CO 80202 Phone: 1 (303) 623-2300	TO: (New Operator): N3670-Patara Oil & Gas, LLC 333 Clay Street, Suite 3960 Houston, TX 77002 Phone: 1 (713) 357-7171
---	---

CA No.

Unit:

LISBON

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED								

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 5/11/2010
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 5/11/2010
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 5/11/2010
- Is the new operator registered in the State of Utah:
 Business Number: 7655540-0161
- (R649-9-2)Waste Management Plan has been received on: * * requested 9/27/10
- Inspections of LA PA state/fee well sites complete on: * * requested 9/27/10
- Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM not yet BIA
- Federal and Indian Units:**
 The BLM or BIA has approved the successor of unit operator for wells listed on: 6/28/2010 & 9/2/2010
- Federal and Indian Communization Agreements ("CA"):**
 The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to Inject, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 6/29/2010
 Lisbon B-816 only

DATA ENTRY:

- Changes entered in the **Oil and Gas Database** on: 9/14/2010
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 9/14/2010
- Bond information entered in RBDMS on: 9/14/2010
- Fee/State wells attached to bond in RBDMS on: 9/14/2010
- Injection Projects to new operator in RBDMS on: 9/14/2010
- Receipt of Acceptance of Drilling Procedures for APD/New on: 5/11/2010

BOND VERIFICATION:

- Federal well(s) covered by Bond Number: UTB000428
- Indian well(s) covered by Bond Number: n/a
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number RLB0013207 & B006008
- The **FORMER** operator has requested a release of liability from their bond on: not yet

LEASE INTEREST OWNER NOTIFICATION:

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER:
2. NAME OF OPERATOR: ENCANA OIL & GAS (USA) INC. <i>N2175</i>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 370 17th Street, Suite 1700 CITY Denver STATE CO ZIP 80202		7. UNIT or CA AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE: See Attached List		8. WELL NAME and NUMBER:
PHONE NUMBER: (303) 623-2300		9. API NUMBER:
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT:

COUNTY:

STATE:

UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective May 4, 2010 Patara Oil & Gas LLC, 333 Clay Street, Suite 3960, Houston, TX 77002, will take over completions and operations and is designated as agent operator for the subject wells on the attached list.

Bond coverage for all activities will be covered by Patara's BLM Statewide Oil & Gas Bond No. UTB000428 and UDOGM Bond No. Pending. *RLB0013207 + B006008*

Patara Oil & Gas LLC, Lane M. Kincannon, Vice-President, Land & Business Development *N3670*

Signature *[Signature]* Date 5/4/2010

NAME (PLEASE PRINT) <u>Ricardo D. Gallegos</u>	TITLE <u>Attorney-in-Fact</u>
SIGNATURE <i>[Signature]</i>	DATE <u>5/4/2010</u>

(This space for State use only)

APPROVED *9/14/2010*
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

(5/2000)

(See Instructions on Reverse Side)

RECEIVED
May 11 2010 ER
DIV. OF OIL, GAS & MINING

ENCANA O-G (N2175) to PATARA O-G (N3670)
effective May 4, 2010
LISBON UNIT

well name	sec	twp	rng	api	entity	lease	well	stat	C
LISBON D-616	16	300S	240E	4303715049	8123	State	OW	S	
LISBON B-615	15	300S	240E	4303715123	8123	Federal	OW	P	
LISBON B912	12	300S	240E	4303715769	8123	Federal	OW	S	
LISBON A-715	15	300S	240E	4303716237	8123	Federal	WD	I	
LISBON B-613	13	300S	240E	4303716240	8123	Federal	OW	S	
LISBON B-616	16	300S	240E	4303716242	8123	State	OW	S	
BELCO ST 4 (LISBON B-816)	16	300S	240E	4303716244	8123	State	WD	A	
LISBON C-69	09	300S	240E	4303716245	8123	Federal	OW	S	
LISBON C-94	04	300S	240E	4303716247	8123	Federal	OW	S	
LISBON UNIT D-84	04	300S	240E	4303716250	8123	Federal	OW	P	
LISBON D-89	09	300S	240E	4303716251	8123	Federal	OW	S	
NW LISBON USA A-2 (D-810)	10	300S	240E	4303716471	8123	Federal	GW	P	
LISBON B-84	04	300S	240E	4303730054	8123	Federal	OW	S	
LISBON B-814	14	300S	240E	4303730082	8123	Federal	WD	A	
LISBON C-99	09	300S	240E	4303730693	8123	Federal	OW	S	
LISBON B-94	04	300S	240E	4303730695	8123	Federal	OW	S	
LISBON UNIT A-911	11	300S	240E	4303731014	8123	Federal	GW	P	
LISBON UNIT D-716	16	300S	240E	4303731034	8123	State	OW	S	
LISBON C-910	10	300S	240E	4303731323	8123	Federal	OW	S	
LISBON B-614A	14	300S	240E	4303731351	8123	Federal	OW	S	
LISBON B-810	10	300S	240E	4303731433	8123	Federal	OW	P	



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
<http://www.blm.gov/ut/st/en.html>



IN REPLY REFER TO
3180
UT-922

June 28, 2010

David M. Laramie
Pataro Oil & Gas, LLC
621 17th Street, Suite 1345
Denver, CO 80293

Re: Successor Operator
Lisbon Unit, UTU630370
San Juan County, Utah

Dear Mr. Laramie:

On June 25, 2010, we received an indenture dated May 4, 2010, whereby EnCana Oil & Gas (USA), Inc. resigned as Unit Operator and Pataro Oil & Gas, LLC was designated as Successor Unit Operator for the Lisbon Unit, San Juan County, Utah. The indenture was executed by both parties and the signatory parties (working interest owners) have complied with Sections 5 and 6 of the unit agreement.

The instrument is hereby approved effective June 28, 2010. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Lisbon Unit Agreement.

Your statewide oil and gas BLM Bond No. UTB000428 will be used to cover unit operations.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate Federal offices, with one copy returned herewith.

If you have any questions, contact Leslie Wilcken of this office at (801) 539-4112.

Sincerely,

/s/ Roger L. Bankert

Roger L. Bankert
Chief, Branch of Minerals

RECEIVED

JUL 06 2010

DIV. OF OIL, GAS & MINING

Enclosure

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING
 CDW

X - Change of Operator (Well Sold)

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective:

11/1/2012

FROM: (Old Operator):
 N3670- Patara Oil & Gas, LLC
 600 17th Street, Suite 1900S
 Denver, CO 80202

 Phone: 1 (303) 825-0685

TO: (New Operator):
 N3645- CCI Paradox Upstream, LLC
 600 17th Street, Suite 1900S
 Denver, CO 80202

 Phone: 1 (303) 825-0685

WELL NAME		CA No.	SEC	TWN	RNG	API NO	Unit:	Lisbon	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
See Attached List												

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 1/23/2013
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 2/7/2013
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 2/12/2013
- Is the new operator registered in the State of Utah: Business Number: 8523441-0161
- (R649-9-2)Waste Management Plan has been received on: Not Yet
- Inspections of LA PA state/fee well sites complete on: N/A
- Reports current for Production/Disposition & Sundries on: 2/12/2013
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM Not Yet BIA N/A
- Federal and Indian Units:**
 The BLM or BIA has approved the successor of unit operator for wells listed on: Not Yet
- Federal and Indian Communization Agreements ("CA"):**
 The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 2/6/2013

DATA ENTRY:

- Changes entered in the **Oil and Gas Database** on: 2/12/2013
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 2/12/2013
- Bond information entered in RBDMS on: 2/7/2013
- Fee/State wells attached to bond in RBDMS on: 2/12/2013
- Injection Projects to new operator in RBDMS on: N/A
- Receipt of Acceptance of Drilling Procedures for APD/New on: 2/4/2013

BOND VERIFICATION:

- Federal well(s) covered by Bond Number: 105865919
- Indian well(s) covered by Bond Number: N/A
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 105865922
- The **FORMER** operator has requested a release of liability from their bond on: N/A

LEASE INTEREST OWNER NOTIFICATION:

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

COMMENTS:

Patara Oil Gas, LLC (N3670) to CCI Paradox Upstream, LLC (N3945)

Effective 11/1/2012

Lisbon Unit

Well Name	Section	TWN	RNG	API Number	Entity	Lease Type	Well Type	Well Status
BELCO ST 4 (LISBON B-816)	16	300S	240E	4303716244	8123	State	WD	A
LISBON B-814	14	300S	240E	4303730082	8123	Federal	WD	A
LISBON A-715	15	300S	240E	4303716237	8123	Federal	WD	I
LISBON B-613	13	300S	240E	4303716240	8123	Federal	OW	P
NW LISBON USA A-2 (D-810)	10	300S	240E	4303716471	8123/9740	Federal	GW	P
LISBON UNIT A-911	11	300S	240E	4303731014	8123	Federal	GW	P
LISBON B-614A	14	300S	240E	4303731351	9740	Federal	OW	P
LISBON B-810	10	300S	240E	4303731433	9740	Federal	OW	P
LISBON B-615	15	300S	240E	4303715123	8123	Federal	OW	S
LISBON B912	12	300S	240E	4303715769	8123	Federal	OW	S
LISBON C-69	09	300S	240E	4303716245	8123	Federal	OW	S
LISBON C-94	04	300S	240E	4303716247	8123	Federal	OW	S
LISBON UNIT D-84	04	300S	240E	4303716250	8123	Federal	OW	S
LISBON D-89	09	300S	240E	4303716251	8123	Federal	OW	S
LISBON B-84	04	300S	240E	4303730054	8123	Federal	OW	S
LISBON C-99	09	300S	240E	4303730693	8123	Federal	OW	S
LISBON B-94	04	300S	240E	4303730695	8123	Federal	OW	S
LISBON C-910	10	300S	240E	4303731323	8123	Federal	OW	S

RECEIVED

JAN 23 2013

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL, GAS WELL, OTHER Multiple Well Transfer
2. NAME OF OPERATOR: Patara Oil & Gas LLC
3. ADDRESS OF OPERATOR: 600 17th St. Ste. 1900S, Denver, CO 80202
4. LOCATION OF WELL: FOOTAGES AT SURFACE: n/a, COUNTY: San Juan, UT, STATE: UTAH

5. LEASE DESIGNATION AND SERIAL NUMBER: n/a
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: n/a
7. UNIT or CA AGREEMENT NAME: n/a
8. WELL NAME and NUMBER: Multiple
9. API NUMBER: n/a
10. FIELD AND POOL, OR WILDCAT: n/a

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

Table with columns: TYPE OF SUBMISSION, TYPE OF ACTION. Includes checkboxes for NOTICE OF INTENT, SUBSEQUENT REPORT, and various actions like ACIDIZE, ALTER CASING, OPERATOR CHANGE, etc.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Patara Oil & Gas LLC (Patara) hereby requests the transfer of operating rights and responsibilities for the subject wells, listed herein, to the new owner/operator of the assets, being effective November 1, 2012; CCI Paradox Upstream LLC (CCI).

Please see Exhibit I for a detailed list of upstream assets considered for transfer. Patara midstream assets will be transferred via a separate letter, enclosed.

NAME (PLEASE PRINT) Christopher A. Noonan TITLE Regulations & Production Reporting Supervisor
SIGNATURE [Signature] DATE 1/18/13

(This space for State use only)

APPROVED

FEB 12 2013

DIV. OF OIL, GAS & MINING

(See Instructions on Reverse Side)

BY: Rachel Medina

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Multiple Well Transfer</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: n/a
2. NAME OF OPERATOR: CCI Paradox Upstream LLC <u>N3945</u>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: n/a
3. ADDRESS OF OPERATOR: 600 17th St. Ste. 1900S CITY <u>Denver</u> STATE <u>CO</u> ZIP <u>80202</u>		7. UNIT or CA AGREEMENT NAME: n/a
4. LOCATION OF WELL FOOTAGES AT SURFACE: <u>n/a</u>		8. WELL NAME and NUMBER: <u>Multiple</u>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		9. API NUMBER: n/a
		10. FIELD AND POOL, OR WILDCAT: n/a
		COUNTY: <u>San Juan, UT</u>
		STATE: <u>UTAH</u>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

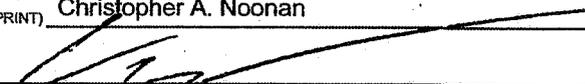
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: <u>11/1/2012</u>	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

CCI Paradox Upstream LLC (CCI), hereby requests the transfer of operating rights and responsibilities for the subject wells, listed herein, to the new owner/operator of the assets, CCI, being effective November 1, 2012. The assets were previously operated by Patara Oil & Gas LLC (Patara) prior to sale.

Please see Exhibit I for a detailed list of upstream assets considered for transfer. Patara midstream assets will be transferred via a separate letter, enclosed.

Bond Number:
Blm: 105865919
State: 105865922

NAME (PLEASE PRINT) <u>Christopher A. Noonan</u>	TITLE <u>Regulations & Production Reporting Supervisor</u>
SIGNATURE 	DATE <u>2/6/2012</u>

(This space for State use only)

APPROVED

FEB 12 2013

DIV. OIL GAS & MINING

BY: Rachel Medina

RECEIVED

FEB 07 2013

Div. of Oil, Gas & Mining

Exhibit I

BLM Form 3160-5 Transfer of Operator

Utah Form 9 Transfer of Operator

State of Utah Upstream Assets

01/09/2013

API Well Number	Operator	Well Name	Well Status	Well Type	Field Name	County	Qtr/Qtr	Section	Township-Range)
✓ 43-037-15049-00-00	PATARA OIL & GAS LLC	LISBON D-616	Shut-In	Oil Well	LISBON	SAN JUAN	NENE	16	30S-24E 1
✓ 43-037-15123-00-00	PATARA OIL & GAS LLC	LISBON B-615	Producing	Oil Well	LISBON	SAN JUAN	NENW	15	30S-24E 2
✓ 43-037-15769-00-00	PATARA OIL & GAS LLC	LISBON B912	Shut-In	Oil Well	LISBON	SAN JUAN	SESW	12	30S-24E 3
✓ 43-037-16219-00-00	PATARA OIL & GAS LLC	BIG INDIAN UNIT 1	Shut-In	Oil Well	BIG INDIAN (MADISON)	SAN JUAN	SENE	33	29S-24E 4
✓ 43-037-16221-00-00	PATARA OIL & GAS LLC	BIG INDIAN 4	Shut-In	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	SWSW	14	30S-25E 5
✓ 43-037-16237-00-00	PATARA OIL & GAS LLC	LISBON A-715	Inactive	Water Disposal Well	LISBON	SAN JUAN	SWNW	15	30S-24E 6
✓ 43-037-16240-00-00	PATARA OIL & GAS LLC	LISBON B-613	Shut-In	Oil Well	LISBON	SAN JUAN	NENW	13	30S-24E 7
✓ 43-037-16242-00-00	PATARA OIL & GAS LLC	LISBON B-616	Shut-In	Oil Well	LISBON	SAN JUAN	NESW	16	30S-24E 8
✓ 43-037-16244-00-00	PATARA OIL & GAS LLC	BELCO ST 4 (LISBON B-816)	Active	Water Disposal Well	LISBON	SAN JUAN	NESW	16	30S-24E 9
✓ 43-037-16245-00-00	PATARA OIL & GAS LLC	LISBON C-69	Shut-In	Oil Well	LISBON	SAN JUAN	NWNE	9	30S-24E 10

✓ 43-037-16247-00-00	PATARA OIL & GAS LLC	LISBON C-94	Shut-In	Oil Well	LISBON	SAN JUAN	SWSE	4	30S-24E 11
✓ 43-037-16250-00-00	PATARA OIL & GAS LLC	LISBON UNIT D-84	Shut-In	Oil Well	LISBON	SAN JUAN	NESE	4	30S-24E 12
✓ 43-037-16251-00-00	PATARA OIL & GAS LLC	LISBON D-89	Shut-In	Oil Well	LISBON	SAN JUAN	NESE	9	30S-24E 13
43-037-16469-00-00	PATARA OIL & GAS LLC	LISBON U B-610	Producing	Oil Well	LISBON	SAN JUAN	NENW	10	30S-24E 14
43-037-16471-00-00	PATARA OIL & GAS LLC	NW LISBON USA A-2 (D-810)	Producing	Gas Well	LISBON	SAN JUAN	NESE	10	30S-24E 15
43-037-30054-00-00	PATARA OIL & GAS LLC	LISBON B-84	Shut-In	Oil Well	LISBON	SAN JUAN	NESW	4	30S-24E 16
43-037-30082-00-00	PATARA OIL & GAS LLC	LISBON B-814	Active	Water Disposal Well	LISBON	SAN JUAN	NESW	14	30S-24E 17
43-037-30317-00-00	PATARA OIL & GAS LLC	FEDERAL 15-25	Shut-In	Gas Well	WILSON CANYON	SAN JUAN	SWSE	25	29S-23E 18
43-037-30693-00-00	PATARA OIL & GAS LLC	LISBON C-99	Shut-In	Oil Well	LISBON	SAN JUAN	SWSE	9	30S-24E 19
43-037-30694-00-00	PATARA OIL & GAS LLC	LISBON U D-610	Shut-In	Gas Well	LISBON	SAN JUAN	NENE	10	30S-24E 20
43-037-30695-00-00	PATARA OIL & GAS LLC	LISBON B-94	Shut-In	Oil Well	LISBON	SAN JUAN	SESW	4	30S-24E 21
43-037-31014-00-00	PATARA OIL & GAS LLC	LISBON UNIT A-911	Producing	Gas Well	LISBON	SAN JUAN	SWSW	11	30S-24E 22
43-037-31034-00-00	PATARA OIL & GAS LLC	LISBON UNIT D-716	Shut-In	Oil Well	LISBON	SAN JUAN	SENE	16	30S-24E 23
43-037-31323-00-00	PATARA OIL & GAS LLC	LISBON C-910	Shut-In	Oil Well	LISBON	SAN JUAN	SWSE	10	30S-24E 24
43-037-31351-00-00	PATARA OIL & GAS LLC	LISBON B-614A	Shut-In	Oil Well	LISBON	SAN JUAN	NENW	14	30S-24E 25
43-037-31433-00-00	PATARA OIL & GAS LLC	LISBON B-810	Producing	Oil Well	LISBON	SAN JUAN	NESW	10	30S-24E 26

43-037-31829-00-00	PATARA OIL & GAS LLC	BIG INDIAN 35-24	Shut-In	Gas Well	SOUTH PINE RIDGE	SAN JUAN	SENE	35	29S-24E 7
43-037-31831-00-00	PATARA OIL & GAS LLC	BULL HORN U 10-43	Producing	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	SWSE	10	30S-25E 8
43-037-31838-00-00	PATARA OIL & GAS LLC	MIDDLE MESA ST 36-14-29-24	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	NENE	36	29S-24E 9
43-037-31843-00-00	PATARA OIL & GAS LLC	BULL HORN FED 9-14-30-25	Producing	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	NENE	9	30S-25E 30
43-037-31848-00-00	PATARA OIL & GAS LLC	BULL HORN FED 15-14-30-25	Producing	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	NENE	15	30S-25E 1
43-037-31849-00-00	PATARA OIL & GAS LLC	BULL HORN FED 10-21-30-25	Producing	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	NWSW	10	30S-25E 2
43-037-31850-00-00	PATARA OIL & GAS LLC	BIG INDIAN FED 14-21-30-25	Producing	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	SWNW	14	30S-25E 3
43-037-31853-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 5-6-30-25	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	LOT6	5	30S-25E 4
43-037-31854-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 31-31-29-25	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	NWSW	31	29S-25E 5
43-037-31855-00-00	PATARA OIL & GAS LLC	MIDDLE MESA ST 36-12-29-24	Shut-In	Gas Well	SOUTH PINE RIDGE	SAN JUAN	NENW	36	29S-24E 6
43-037-31856-00-00	PATARA OIL & GAS LLC	MIDDLE MESA ST 36-24-29-24	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	SENE	36	29S-24E 7
43-037-31859-00-00	PATARA OIL & GAS LLC	BIG INDIAN FED 15-24-30-25	Shut-In	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	SWNW	14	30S-25E 8
43-037-31860-00-00	PATARA OIL & GAS LLC	BIG INDIAN FED 14-42-30-25	Producing	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	SESW	14	30S-25E 9
43-037-31861-00-00	PATARA OIL & GAS LLC	BULL HORN FED 10-42-30-25	Shut-In	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	SESW	10	30S-25E 40
43-037-31864-00-00	PATARA OIL & GAS LLC	BULL HORN FED 10-31-30-25	Producing	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	NWSW	10	30S-25E 1
43-037-31877-00-00	PATARA OIL & GAS LLC	MIDDLE MESA ST 36-12B-29-24	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	NENW	36	29S-24E 2

43-037-31878-00-00	PATARA OIL & GAS LLC	MIDDLE MESA ST 36-24B-29-24	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	SENE	36	29S-24E 3
43-037-31883-00-00	PATARA OIL & GAS LLC	BIG INDIAN FED 15-24B-30-25	Shut-In	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	SWNW	14	30S-25E 4
43-037-31884-00-00	PATARA OIL & GAS LLC	BIG INDIAN FED 23-13B-30-25	Approved permit (APD); not yet spudded	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	NWNE	23	30S-25E 5
43-037-31885-00-00	PATARA OIL & GAS LLC	BIG INDIAN FED 23-13-30-25	Approved permit (APD); not yet spudded	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	NWNE	23	30S-25E 6
43-037-31891-00-00	PATARA OIL & GAS LLC	BULL HORN FED 15-13-30-25	Producing	Gas Well	BIG INDIAN (HERMOSA)	SAN JUAN	NENE	15	30S-25E 7
43-037-31893-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 30-41-29-25	Approved permit (APD); not yet spudded	Gas Well	UNDESIGNATED	SAN JUAN	SWSW	30	29S-25E 8
43-037-31897-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 5-10-30-25	Spudded (Drilling commenced: Not yet completed)	Gas Well	SOUTH PINE RIDGE	SAN JUAN	LT10	5	30S-25E 9
43-037-31901-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 25-43-29-24	Approved permit (APD); not yet spudded	Gas Well	UNDESIGNATED	SAN JUAN	SWSE	25	29S-24E 10
43-037-31902-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 25-41-29-24	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	SWSW	25	29S-24E 1
43-037-31903-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 25-31-29-24	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	NWSW	25	29S-24E 2
43-037-31904-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 26-34-29-24	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	NESW	26	29S-24E 3

43-037-31905-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 26-23-29-24	Approved permit (APD); not yet spudded	Gas Well	UNDESIGNATED	SAN JUAN	SWNE	26	29S-24E 4
43-037-31906-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 31-44-29-25	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	SESE	31	29S-25E 5
43-037-31907-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 31-33-29-25	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	NWSE	31	29S-25E 4
43-037-31909-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 31-22-29-25	Approved permit (APD); not yet spudded	Gas Well	SOUTH PINE RIDGE	SAN JUAN	SENW	31	29S-25E 7
43-037-31910-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 31-11-29-25	Approved permit (APD); not yet spudded	Gas Well	SOUTH PINE RIDGE	SAN JUAN	NWNW	31	29S-25E 8
43-037-50008-00-00	PATARA OIL & GAS LLC	CISCO STATE 36-13	Temporarily-Abandoned	Gas Well	WILDCAT	SAN JUAN	NWNE	36	31S-24E 9
43-037-50010-00-00	PATARA OIL & GAS LLC	MIDDLE MESA FED 4-20-30-25	Producing	Gas Well	SOUTH PINE RIDGE	SAN JUAN	SWNW	4	30S-25E 60
43-037-50012-00-00	PATARA OIL & GAS LLC	Lisbon 11-32MC	Returned APD (Unapproved)	Oil Well	UNDESIGNATED	SAN JUAN	SWNE	11	30S-24E 1
43-037-50013-00-00	PATARA OIL & GAS LLC	Lisbon 14-11MC	Approved permit (APD); not yet spudded	Oil Well	LISBON	SAN JUAN	NWNW	14	30S-24E 2
43-037-50014-00-00	PATARA OIL & GAS LLC	Lisbon 10-44MC	Approved permit (APD); not yet spudded	Oil Well	LISBON	SAN JUAN	NWNW	14	30S-24E 3

43-037-50015-00-00	PATARA OIL & GAS LLC	Lisbon 3-32MC	Approved permit (APD); not yet spudded	Oil Well	LISBON	SAN JUAN	NESE	4	30S-24E	4
43-037-50016-00-00	PATARA OIL & GAS LLC	Lisbon 11-33MC	Approved permit (APD); not yet spudded	Oil Well	LISBON	SAN JUAN	NENW	14	30S-24E	5
43-037-50017-00-00	PATARA OIL & GAS LLC	Lisbon 11-21MC	Approved permit (APD); not yet spudded	Gas Well	LISBON	SAN JUAN	NWSE	10	30S-24E	6
43-037-50018-00-00	PATARA OIL & GAS LLC	Lisbon 3-43MC	Approved permit (APD); not yet spudded	Oil Well	LISBON	SAN JUAN	SESE	3	30S-24E	7
43-037-50019-00-00	PATARA OIL & GAS LLC	Lisbon 10-33MC	Spudded (Drilling commenced: Not yet completed)	Oil Well	LISBON	SAN JUAN	NWSE	10	30S-24E	8
43-037-50021-00-00	PATARA OIL & GAS LLC	Middle Mesa Fed 31-42-29-25	Approved permit (APD); not yet spudded	Gas Well	SOUTH PINE RIDGE	SAN JUAN	SESW	31	29S-25E	9
43-037-50026-00-00	PATARA OIL & GAS LLC	Middle Mesa Federal 5-8-30-25	Approved permit (APD); not yet spudded	Gas Well	SOUTH PINE RIDGE	SAN JUAN	NENE	5	30S-25E	10