

Humble Oil & Refining Company owns 100% Share  
Interest.

FILE NOTATIONS

Entered in NID File

Entered On S R Sheet

Location Map Pinned

Card Indexed

IWR for State or Fee Land

Checked by Chief                     

Copy NID to Field Office                     

Approval Letter                     

Disapproval Letter                     

COMPLETION DATA:

Date Well Completed 8-2-65

Location Inspected                     

OW            WW            TA           

Bond released                     

GW  OS            PA           

State of Fee Land                     

Driller's Log 9-2-65

LOGS FILED

Electric Logs (No. ) 2

E            I            E-I            GR            GR-N            Micro           

Lat.            Mi-L            Sonic            Others

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG  ELECTRIC  FILE  WATER SANDS  LOCATION  SPECTED  SUB. REPORT/abd.

\* *Revised meter log well due to tool company*

DATE FILED 5-3-65

LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. U-020691-A INDIAN

DRILLING APPROVED In Unit

SPUDED IN: 6-8-65

COMPLETED: 7-6-65 PUT TO PRODUCING: 7-2-65

INITIAL PRODUCTION: 944 BOPD 4065 MCF/D

GRAVITY A.P.I.

GOR: 1128:2

PRODUCING ZONES: 8326-8516' Mississippian

TOTAL DEPTH: 8605' PT

WELL ELEVATION: 6099' G 6105' XE

DATE ABANDONED:

FIELD: Lisbon

UNIT: Lisbon

COUNTY: San Juan

WELL NO. LISBON UNIT A-715

API 43-039-14237

LOCATION 2620' FT. FROM (N) ~~EX~~ LINE, ~~125'~~ FT. FROM ~~EX~~ (W) LINE. SW SW NW <sup>5</sup> 1/4-1/4 SEC. 15

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR:
330 S	24 E	15	UNION OIL CO. OF CALIF.				

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG  ELECTRIC  FILE  WATER SANDS  LOCATION  SUB. REPORT/abd.

\* *Rooted material 50' west due to topography*

DATE FILED 5-3-65  
 LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. U-020691-A INDIAN

DRILLING APPROVED *In Unit*  
 SPUDDED IN: *6-8-65*  
 COMPLETED: *7-6-65* PUT TO PRODUCING: *8-2-65*  
 INITIAL PRODUCTION: *944 BOPD 6065 MCF/10*

GRAVITY A.P.I.  
 GOR: *1128.2*  
 PRODUCING ZONES: *8326-8516' Mississippian*  
 TOTAL DEPTH: *8605' PT*  
 WELL ELEVATION: *6089' G 6105' XB*

*Casing leak in  
 1991 - squeezed*

DATE ABANDONED:  
 FIELD: Lisbon  
 UNIT: Lisbon  
 COUNTY: San Juan

WELL NO. LISBON UNIT A-715  
 LOCATION 2620' FT. FROM (N) ~~EX~~ LINE, *125'* FT. FROM (W) LINE. SW SW NW <sup>5</sup> 4-4 SEC. 15  
 API 43-037-14237

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR:
390 S	24 E	15	UNION OIL CO. OF CALIF.				

*Electric Log Dept*

GEOLOGIC TOPS:

QUATERNARY	Star Point	Chinle	Molas <sup>6</sup>	8122'
Alluvium	Wahweap	Shinarump	Manning Canyon	
Lake beds	Masuk	Moenkopi	Mississippian	8126'
Pleistocene	Colorado	Sinbad	<del>MISS. dolo. For.</del>	8326
Lake beds	Sego	PERMIAN	Brazer	
TERTIARY	Buck Tongue	Kaibab	Pilot Shale	
Pliocene	Castlegate	Coconino	Madison	
Salt Lake	Mancos	Cutler	Leadville	
Oligocene	Upper	Hoskinnini	Redwall	
Norwood	Middle	DeChelly	DEVONIAN	
Eocene	Lower	White Rim	Upper	
Duchesne River	Emery	Organ Rock	Middle	
Uinta	Blue Gate	Cedar Mesa	Lower	
Bridger	Ferron	Halgaite Tongue	Ouray	
Green River	Frontier	Phosphoria	Elbert	
	Dakota	Park City	McCracken	
	Burro Canyon	Rico (Goodridge)	Aneth	
	Cedar Mountain	Supai	Simonson Dolomite	
	Buckhorn	Wolfcamp	Sevy Dolomite	
	JURASSIC	CARBONIFEROUS	North Point	
Wasatch	Morrison	Pennsylvanian	SILURIAN	
Stone Cabin	Salt Wash	Oquirrh	Laketown Dolomite	
Colton	San Rafael Gr.	Weber	ORDOVICIAN	
Flagstaff	Summerville	Morgan	Eureka Quartzite	
North Horn	Bluff Sandstone	Hermosa	Pogonip Limestone	
Almy	Curtis	Pardox A	CAMBRIAN	
Paleocene	Entrada	Pardox B	Lynch	
Current Creek	Moab Tongue	Ismay	Bowman	
North Horn	Carmel	Desert Creek	Tapeats	
CRETACEOUS	Glen Canyon Gr.	Akahi	Ophir	
Montana	Navajo	Barker Creek	Tintic	
Mesaverde	Kayenta		PRE-CAMBRIAN	
Price River	Wingate	Top of salt		4936'
Blackhawk	TRINAC	Base of salt		8622'

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
 DRILL  DEEPEN  PLUG BACK

b. TYPE OF WELL  
 OIL WELL  GAS WELL  OTHER   
 SINGLE ZONE  MULTIPLE ZONE

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.)\*  
 At surface **2,620' FWL and 90' FWL (SE-NW)**  
 At proposed prod. zone **(SW SW NW)**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. line, if any) **90'**

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. **None**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**Will be furnished later.**

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
2 1/2"	20" - If needed		30'	To surface
1 5/8"	10-3/4"	40.5#	√-55 700'	To surface
8-3/4"	5-1/2"	15.5# & 17#	√-55 8,700'	With sufficient cement to meet conditions encountered

Propose to drill a Mississippian development well with rotary tools and drilling mud as necessary to an estimated total depth of 8,700'.

No cores or DST's are anticipated.

The objective is the Mississippian Formation.

Estimated Tops:

Harnosa	2,450' (+3625)	Base of Salt	7,950' (-1875)
Paradox	4,000' (+2075)	Mississippian	8,075' (-2000)
Top of Salt	4,325' (+1750)		

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. ORIGINAL SIGNED BY  
 SIGNED R. E. DAVIS TITLE District Office Manager DATE 4-28-65  
R. E. Davis

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

5. LEASE DESIGNATION AND SERIAL NO.  
**U.S.A. U-020671-A**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
**Libson Unit**

8. FARM OR LEASE NAME  
**Libson Unit**

9. WELL NO.  
**A-715**

10. FIELD AND POGL, OR WILDCAT  
**Libson - Miss. - Dev.**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
**Sec. 15, T-30S, R-24E  
 S.1.P.M.**

12. COUNTY OR PARISH  
**San Juan**

13. STATE  
**Utah**

16. NO. OF ACRES IN LEASE  
**5878.76 Part. Area  
 20741.92 Unit Area**

17. NO. OF ACRES ASSIGNED TO THIS WELL

19. PROPOSED DEPTH  
**8,700'**

20. ROTARY OR CABLE TOOLS  
**Rotary**

22. APPROX. DATE WORK WILL START\*  
**May 12, 1965**

THE PURE OIL COMPANY

LOCATION REPORT

Lisbon Unit

A.F.E. No. 4887

Date April 5, 1965

Division Northern Producing

Prospect District

Casper - Moab Area

Lease U.S.A. (U.020691-A)

5,878.76 Participating Area

Lisbon Unit

Acres 20,941.92 Unit area

Elevation

Well No. A-715 (Serial No. \_\_\_\_\_)

Quadrangle SE NW

Sec. 15

Twp. 30S

Rge. 24E

Blk. Dist. Twp.

Survey Salt Lake Meridian

County San Juan

State Utah

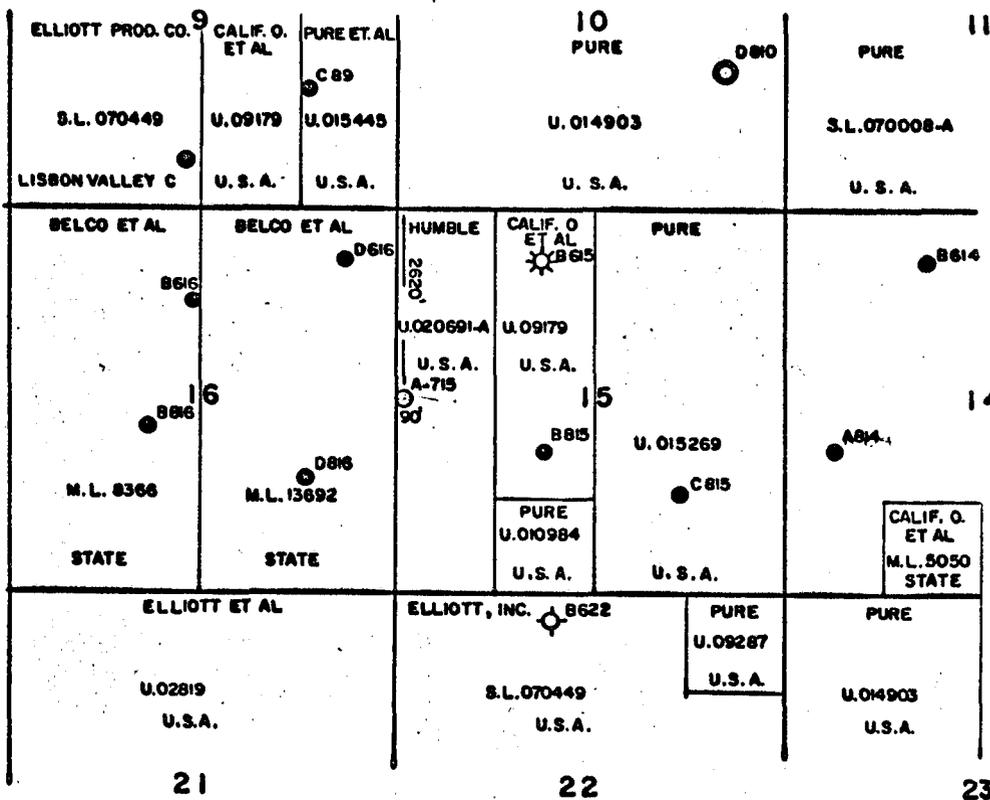
Operator The Pure Oil Company

Map Utah 1-4

2620 Feet South of the North line of Section  
 90 Feet East of the West line of Section  
 \_\_\_\_\_ Feet of the \_\_\_\_\_ line of \_\_\_\_\_  
 \_\_\_\_\_ Feet of the \_\_\_\_\_ line of \_\_\_\_\_

LEGEND

- Gas Well
- Oil Well
- Gas-Distillate Well
- Dry Hole
- Location
- Abandoned Location
- or Abandoned Gas Well
- or Abandoned Oil Well
- or Input Well



Scale 2" = 1 Mile

Remarks: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Submitted by *R. L. Ludtke* Civil Engineer

Approved by \_\_\_\_\_ Division Manager

Approved by \_\_\_\_\_ Vice-President-General Manager

May 3, 1965

The Pure Oil Company  
P. O. Box 1611  
Casper, Wyoming

Attention: Mr. R. E. Davis, District Office Manager

Re: Notice of Intention to Drill Well No.  
LISBON UNIT A-715, 2620' FNL & 90'  
FWL, SE NW of Sec. 15, T. 30 S., R.  
24 E., S15M, San Juan County, Utah.

Gentlemen:

Insofar as this office is concerned, approval to drill the above mentioned well is hereby granted.

It appears that the description of the given quadrangle is in error and should read SW NW of Section 15. Please advise this office if we have made a wrong assumption.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT  
EXECUTIVE DIRECTOR

CBF:kgv

cc: Mr. Rodney Smith, District Engineer  
U. S. Geological Survey, Salt Lake City, Utah

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

Form approved.  
Budget Bureau No. 42-R142

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. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <b>Drilling Well</b>		5. LEASE DESIGNATION AND SERIAL NO. <b>U.S.A. U-020691-A</b>
2. NAME OF OPERATOR <b>The Pure Oil Company</b>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR <b>P. O. Box 1611 - Casper, Wyoming</b>		7. UNIT AGREEMENT NAME <b>Lisbon Unit</b>
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface <b>2,620' FNL and 125' FWL (SW NW)</b> <b>(Location was moved 35' east due to topography)</b>		8. FARM OR LEASE NAME <b>Lisbon Unit</b>
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) <b>Will be furnished later.</b>	9. WELL NO. <b>A-715</b>
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT <b>Lisbon - Miss. - Dev.</b>
NOTICE OF INTENTION TO:		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <b>Sec. 15, T-30S, R-24E S.L.P.M.</b>
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	12. COUNTY OR PARISH
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	13. STATE
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	<b>San Juan</b>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	<b>Utah</b>
(Other) <input type="checkbox"/>		
		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) <b>Supplementary Well History</b> <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.)\*

Spudded at 5:00 p.m. 6-8-65. Drilled 15" hole to 713'. On 6-10-65 ran 25 jts. of 10-3/4" OD 40.5# J-55 casing, set at 713' KB. Cemented with 375 cu. ft. of 50-50 Pozmix with 4% gel and 2% calcium chloride and 107 cu. ft. 50-50 Pozmix, no gel, 2% calcium chloride. Good returns. Job complete at 11:45 p.m. 6-10-65.

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

SIGNED J. B. Strong TITLE Senior District Clerk DATE 6-14-65

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF INTERIOR  
GEOLOGICAL SURVEY

Land Office Salt Lake City  
Lease Number USA U-020691-A  
Unit Lisbon Unit

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County San Juan Field Lisbon

The following is a correct report of operations and production (including drilling and producing wells) for month of June, 1965, The Pure Oil Company

Agent's address P. O. Box 1611 Company Division of Union Oil Co. of Calif.  
Casper, Wyoming Signed R. L. Davis

Phone 234-1565 Agent's title District Office Manager

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)
Sec. 15 SW NW	30S	24E	A715	-0-						Location: 2,620' FNL and 125' FWL. Elevations: GL 6,089', KB 6,105' - L & S. Spudded at 5:00 p.m. June 8, 1965. Drilled 15" hole to 713'. On June 10, 1965 ran 25 jts. of 10-3/4" OD 40.5# J-55 casing, set at 713' KB. Cemented with 375 cu. ft. of 50-50 Pozmix with 4% gel and 2% calcium chloride and 107 cu. ft. of 50-50 Pozmix, no gel, 2% calcium chloride. Good returns. Drilled 8-3/4" hole to 4,171' - Incomplete.

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.

UNITED STATES  
DEPARTMENT OF INTERIOR  
GEOLOGICAL SURVEY

Land Office Salt Lake City  
Lease Number USA U-020691-A  
Unit Lisbon Unit

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County San Juan Field Lisbon

The following is a correct report of operations and production (including drilling and producing wells) for month of July, 1965, The Pure Oil Company - Division

Agent's address P. O. Box 1611 Company of Union Oil Co. of Calif.  
Casper, Wyoming Signed R. E. Davis

Phone 234-1565 Agent's title District Office Manager

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)
Sec. 15 SW NW	30S	24E	A715	-0-						<p>Drilled 4,171' to 8,605' Total Depth. (8,570' PBTD) Set 5 1/2" OD casing at 8,605' KB, cemented with 150 cu. ft. 50/50 Posmix, 2% Gel, salt saturated and 3/4# CFR2 per sack. 1st Stage spearheaded with approximately 25 bbls. Mud Flush, good returns indicated. 2nd Stage cemented with 1,600 cu. ft. 50/50 Posmix, 8% Gel, salt saturated. Displaced with water. Recovered Mud Flush. Drilled out packoff collar at 8,204' and cleaned out to 8,570' PBTD. Ran correlation Logs. Lane-Wells perforated 8,442' - 8,496' using NCF-2 Cone shot, 2 per foot, 54' for a total of 108 holes. Ran Baker model R-2 Packer on 2-7/8" OD EUE tubing, set packer at 8,384'. Swabbed well to 6,500', well started flowing to pit through a 1" chpke. Flowed well 30 minutes to clear perforations. Killed well with fresh water. Dowell acidized through perforations as follows: Spotted 150 gallons BDA acid over perforations and let set 30 minutes, followed by 5,000 gallons 15% Reg. HCL acid. Formation broke down at 1,300 psi. Flushed with 50 bbls. fresh water. 8- 1-65 installing well head equipment to test well. Incomplete.</p> <p>THE PURE OIL COMPANY MERGED INTO UNION OIL COMPANY OF CALIFORNIA EFFECTIVE JULY 16, 1965.</p>

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.

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.S.A. U-020691-A

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.)

1.

OIL WELL  GAS WELL  OTHER  **Drilling Well**

2. NAME OF OPERATOR

**The Pure Oil Company, A Division of Union Oil Co. of Calif.**

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

**2,620' FWL and 125' FWL (SW NW)**

7. UNIT AGREEMENT NAME

**Lisbon Unit**

8. FARM OR LEASE NAME

**Lisbon Unit**

9. WELL NO.

**A-715**

10. FIELD AND POOL, OR WILDCAT

**Lisbon - Miss. - Dev.**

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

**Sec. 15, T.30S, R.24E  
SL PM**

14. PERMIT NO.

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

**6,089' Q1, 6,105' KB**

12. COUNTY OR PARISH

**San Juan**

13. STATE

**Utah**

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 ATTACHED SUPPLEMENT SHEET)

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

ORIGINAL SIGNED BY

SIGNED R. E. DAVIS

TITLE District Office Manager

DATE 8-4-65

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

The Pure Oil Company,  
A Division of Union Oil Co. of California  
P. O. Box 1611  
Casper, Wyoming

LEASE NO. U.S.A. U-020691-A  
LISBON UNIT WELL NO. A-715  
Sec. 15, T.30S, R.24E  
S.L.P.M.  
San Juan County, Utah

Drilled from 713' - 8,605' TD. Drilling completed 5:45 AM 7-23-65. Ran Electric Logs.

LOG TOPS:

Top of Salt	4,936'	(+1,169')
Base of Salt	8,022'	(-1,917')
Molas Shale	8,120'	(-2,015')
Mississippian	8,132'	(-2,027')
Mississippian Porosity	8,326'	(-2,231')

July 24, 1965, set 259 joints of 5-1/2" OD casing at 8,605' as follows:  
Weatherford TA scratchers 8,605' - 8,300' spaced 10' apart. Ran 1 Weatherford Cement Basket below HOWCO DV Packoff Collar, 15 HOWCO casing centralizers starting at bottom of 5-1/2" casing. Casing was reciprocated slowly 1 hour prior to and during first stage cementing and for 15 minutes after cement was displaced. First Stage Cementing: Spearheaded with approximately 25 bbls. mud flush. Cemented with 150 cubic feet of 50/50 Posmix with 2% Gel, salt saturated and 3/4# CFR2 added per sack of mix. Displaced with drilling mud. Circulation was established and mud circulated for one hour. Good returns. Second Stage Cementing: Cemented with 1,600 cubic feet of 50/50 Posmix with 8% Gel, salt saturated. Displaced with water. Plug down at 1:30 AM 7-25-65. Did not recover cement at surface. Recovered Mud Flush. Set 5-1/2" OD casing slips, and cut off.

Released Rotary Rig at 2:30 PM, July 25, 1965.

July 30, 1965 moved in Well Service Unit and drilled out Packoff Collar at 8,204'. Ran bit to bottom 8,570' PSTD. Circulated with fresh water to clean hole. Pulled tubing and bit. Lane Wells ran Gamma Ray Correlation Collar Log. Perforated using Lane-Wells NCF-2 Cone Shot, 2 per foot (54' - 108 holes). Ran 2-7/8" OD EUE tubing with Baker Model R-2 Packer. Set packer at 8,384' with 2 joints tubing below packer. Swab well to 6,500', well started flowing through 1" choke. Flowed well for 30 minutes to clean perforations. Good blow of gas with some oil and water. Killed well. Lowered tubing 1 joint. Tubing set at 8,491' and top of packer at 8,422'.

Dowell acidized through perforations 8,442' - 8,496' as follows: July 31, 1965 Spearhead of 125 bbls. water followed by 150 gallon BDA acid, spotted acid over perforations and let set 30 minutes, then pumped in 5,000 gallon 15% Reg. HCL acid. Injection pressure 1,500 psi at 1/8 bbl. per minute until 3 bbls. acid displaced into formation, increased injection rate to 1-1/2 bbls. per minute to 6-1/2 bbls. per minute. Formation broke down at 1,300 psi. Flushed with 50 bbls. fresh water.

Preparing to test well.

COMMISSIONERS

B. H. CROFT  
CHAIRMAN

C. R. HENDERSON

C. S. THOMSON

M. V. HATCH

J. H. REESE

EXECUTIVE DIRECTOR

C. B. FEIGHT



MEMBER ENGINEERS

W. W. FOWLER, P.E.  
D. W. HARRIS, P.E.

HARVEY L. QUANTS  
SALT LAKE CITY

THE STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

348 EAST SOUTH TEMPLE  
SUITE 301  
SALT LAKE CITY, UTAH 84111

DAvis 8-5771

August 18, 1965

Pure Oil Company  
P. O. Box 1611  
Casper, Wyoming

Re: Well No. Lisbon Unit A-715 &  
Well No. Lisbon Unit D-715  
Sec. 15, T. 30 S., R. 24 E.,  
San Juan County, Utah

July, 1965

Gentlemen:

Our records indicate that you have not filed a Monthly Report of Operations for the above mentioned month (s), for the subject well. Rule C-22(1), General Rules and Regulations and Rules of Practice and Procedure, Utah State Oil and Gas Conservation Commission, requires that said reports be filed on or before the sixteenth (16) day of the succeeding month. This report may be filed on Form OGCC-1b (U. S. Geological Survey Form 9-331, "Sundry Notices and Reports on Wells"), or on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your immediate attention is required in this matter.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

KATHY G. WARNER  
RECORDS CLERK

kgw

Encl: Forms

9/165

Mr. Gibbs - Pure Oil in Moab

A → 175 Well in Tesbon field

but porosity higher (in gas section)

↓  
lost circulation

↓  
stuck pipe → fishing

being logged at present time

- ① Plug top of Mississippian
- ② Another plug under Whelpstock  
≈ 500 ft. above

T. D. 8585 (sample logs)

Miss top 8264

8362 Porosity

Fish → 8396

→ above top of Miss. to top of fish  
Will try once more to get fish and then  
Whelpstock - JWB → gave verbal approval

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.5.

157

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
**The Pure Oil Co., A Division of Union Oil Co. of California**

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface **2620' FNL & 125' FWL (SW NW)**  
At top prod. interval reported below  
At total depth

14. PERMIT NO. \_\_\_\_\_ DATE ISSUED \_\_\_\_\_

15. DATE SPUNDED **6-8-65** 16. DATE T.D. REACHED **7-23-65** 17. DATE COMPL. (Ready to prod.) **8-2-65**

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* **GL 6089'; KB 6105'**

20. TOTAL DEPTH, MD & TVD **8,605'** 21. PLUG, BACK T.D., MD & TVD **8,570'** 22. IF MULTIPLE COMPL., HOW MANY\* \_\_\_\_\_

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
**Mississippian - 8,326' to 8,516'**

26. TYPE ELECTRIC AND OTHER LOGS RUN  
**Schlumberger Gamma Ray - Sonic and Laterolog**

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
10-3/4"	40.5#	713'	15"	375 cu. ft. 50-50 Pozmix	-0-
5-1/2"	17# & 15.5#	8,605'	8-3/4"	1750 cu. ft. 50-50 Pozmix	-0-

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	8,491'	8,422'

31. PERFORATION RECORD (Interval, size and number)  
**8,442' - 8,496' with NCF-2 cone shots, 2 per foot**

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
8442'-8496'	150 gals. BDA & 1500 gals. 15% HCl

33.\* PRODUCTION  
DATE FIRST PRODUCTION **8-2-65** PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) **Flowing** WELL STATUS (Producing or shut-in) **Producing**

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8-19-65	24	26/64"	→	944	1,065	-0-	1128

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
875	---	→	944 ✓	1,065	-0-	---

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) **Recycled** TEST WITNESSED BY **A. M. Pettry**

35. LIST OF ATTACHMENTS **None**  
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
ORIGINAL SIGNED BY **R. E. DAVIS** TITLE **District Office Manager** DATE **9-1-65**

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. **Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

**37. SUMMARY OF POROUS ZONES:**  
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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Hermosa	3,168'	4,936'	Various porous zones - water bearing - not tested
Mississippian	8,326'	TD	Various oil bearing porous zones

**38. GEOLOGIC MARKERS**

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Hermosa	3,168'	+2937
Paradox A	4,552'	+1553
Paradox B	4,730'	+1375
Top of Salt	4,936'	+1167
Base of Salt	8,022'	-1917
Molas	8,122'	-2017
Miss. Fm.	8,126'	-2031
Miss. dolo. por.	8,326'	-2221

SEP 2 1965

Copy  
3-  
FORM OGCC-8-X

MPD

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION  
348 EAST SOUTH TEMPLE  
SUITE 301  
SALT LAKE CITY, UTAH

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number: Lisbon Unit A-715  
The Pure Oil Co.  
Operator A Division of Union Oil Co. Address Box 1611-Casper, Wyo Phone 234-1565  
of California  
Contractor Loffland Bros. Address Casper, Wyoming Phone \_\_\_\_\_  
Location SW 1/4 NW 1/4 Sec. 15 T. 30S N R. 24E E San Juan County, Utah.  
S W

Water Sands:

<u>Depth</u>		<u>Volume</u>		<u>Quality</u>
From	To	Flow Rate or Head		Fresh or Salty
1. <u>3,168'</u>	<u>4,936'</u>	<u>Not tested</u>		
2. _____	_____	_____		
3. _____	_____	_____		
4. _____	_____	_____		
5. _____	_____	_____		

(Continued on reverse side if necessary)

Formation Tops:

Hermosa	3,168' (+2937)	Top of Salt	4,936' +1167
Paradox A	4,552' (+1553)	Base of Salt	8,022' -1917
Paradox B	4,730' (+1375)	Molas	8,122' -2017
Remarks:		Miss Fm.	8,126' -2031
		Miss Por.	8,326' -2221

- NOTE:
- (a) Upon diminishing supply of forms, please inform the Commission.
  - (b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure, (See back of form).
  - (c) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

Form 3160-5  
(June 1990)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
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.  
UTU 02069 1A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

LISBON UNIT

8. Well Name and No.  
A-715

9. API Well No.  
43-037-16237

10. Field and Pool, or Exploratory Area

Lisbon Miss.

11. County or Parish, State

San Juan,  
Utah

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

Union Oil Company of California

3. Address and Telephone No.

3300 N. Butler, Ste 200, Farmington, NM 87401 (505) 326-7600

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2620' FNL & 125' FWL  
Sec. 15, T30S R24E

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

TYPE OF SUBMISSION

- Notice of Intent
- Subsequent Report
- Final Abandonment Notice

TYPE OF ACTION

- Abandonment
- Recompletion
- Plugging Back
- Casing Repair
- Altering Casing
- Other
- Change of Plans
- New Construction
- Non-Routine Fracturing
- Water Shut-Off
- Conversion to Injection
- Dispose Water

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

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 drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Moved in and rigged up pulling unit on July 26, 1991 to recomplete the Lisbon Unit A-715 higher in the Mississippian formation. Set CIBP @ 8435' isolating current producing perms. Squeezed casing leaks at 976' and 1328' with 1200 Sx, pressure tested casing to 1250 psi and held okay. Perforated at 8234'-43', 8250'-54', and 8326'-8420' with 2 shots per foot. Set production packer 8138' with tubing depth at 8150'. Swabbed well in and returned to production on August 23, 1991.

Prior Prod: 30 BOPD + 1222 MCFD + 1574 BWPD  
(30 day June, 1991 ave)

Prod After Workover: 86 BOPD + 1798 MCFD + 474 BWPD  
(7 day average)

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

Signed [Signature]

Title Field Superintendent

Date 9/23/91

(This space for Federal or State office use)

Approved by [Signature]  
Conditions of approval, if any:

Accept SHM 10/19/91

Title Branch of Fluid Minerals  
Moab District

Date OCT 21 1991

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

**COPY**

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. 8910079759
2. Name of Operator: Tom Brown, Inc.		6. If Indian, Allotte or Tribe Name NA
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) 2620' FNL & 125' FWL Sec 15-T30S-R24E		8. Well Name and No. Lisbon Unit A-715
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		9. API Well No. 43-037-16237
TYPE OF SUBMISSION		10. Field and Pool, or Exploratory Area Lisbon Mississippian
TYPE OF ACTION		11. County or Parish, State San Juan County, 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 checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Add perms to</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>Mississippian</u>

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 & wellbore diagram

Federal Approval Of This  
Action Is Necessary

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

COPY SENT TO OPERATOR  
Date: 2-28-01  
Initials: CHD

Date: 2/26/01  
By: R. Allmeyer

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 2/6/01

**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	

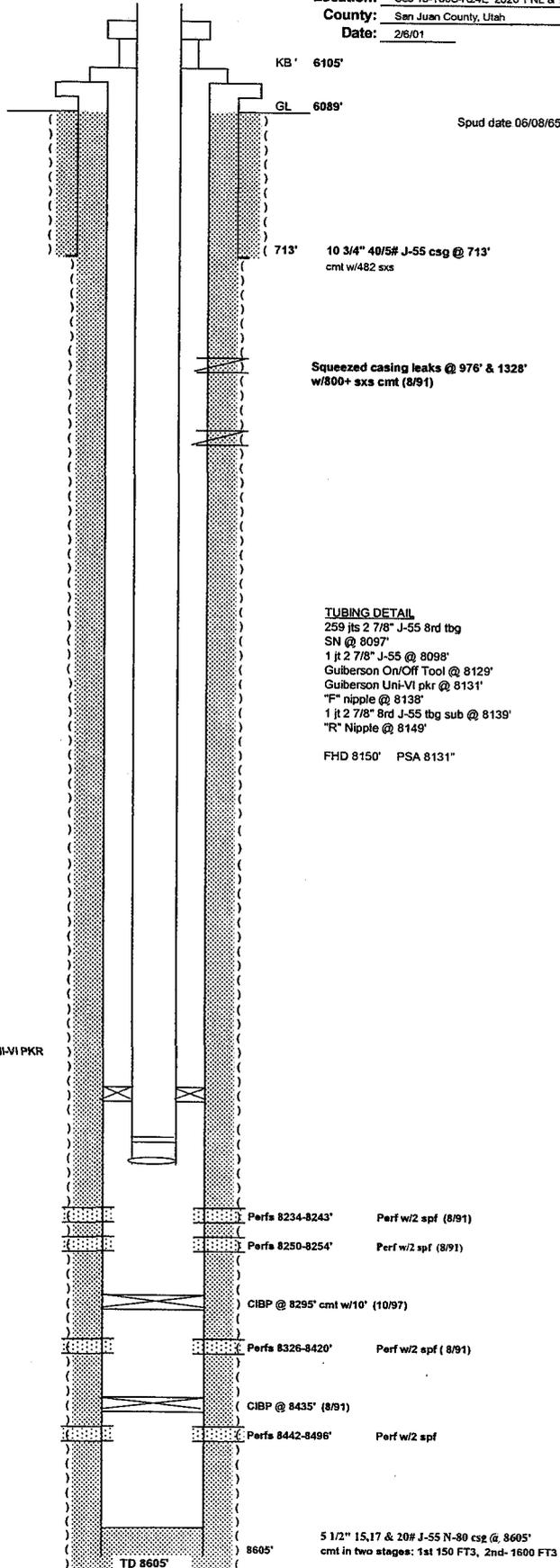
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**FEB 20 2001**  
**DIVISION OF  
OIL, GAS AND MINING**

*file*

WELBORE DIAGRAM

Company: Tom Brown, Inc.  
 Lease Name: Lisbon Unit A-715  
 Location: Sec 15-T30S-R24E 2620' FNL & 125' FWL  
 County: San Juan County, Utah  
 Date: 2/6/01



Casing Detail  
 18-50' KB 20# N-80  
 50-2204' 17# J-55  
 2204-7708' 15.5# J-55  
 7708-8605' 17# J-55

**RECEIVED**

**FEB 20 2001**

**DIVISION OF OIL, GAS AND MINING**

**Tom Brown, Inc.**  
**Well Recompletion Procedure**  
**January 29, 2001**

**Lisbon Unit A-715**  
**2620' FNL & 125' FWL, Sec. 15-T30S-R24E**  
**Lisbon (Mississippian) Unit**  
**San Juan County, Utah**

**Prepared by:** Byron R. Gale  
**Office:** 303-260-5036  
**Cell:** 303-884-0256  
**Home:** 303-674-9600  
**E-mail:** [brgale@tombrown.com](mailto:brgale@tombrown.com)

**AFE Number:**  
**API Number:**

**TBI Working Interest:** 95.83%  
**TBI Net Revenue Interest:** 81.62%

**Spud Date:** 6/8/65  
**Rig Release Date:** 7/23/65

**TD:** 8,605'  
**PBTD:** 8,285' (CIBP @ 8,295' w/ 10' cmt)  
**GL elevation:** 6,089'  
**KB elevation:** 6,105'

**Surface Casing:** 10-3/4", 40.5#, J-55 set @ 713'  
Cmt'd w/ 482 cu. ft. 50-50 Pozmix (15" hole)  
**Production Casing:** 5-1/2", 20#, 17# & 15.5#, J-55 & N-80 casing, set @ 8,605'  
Cmt'd in two stages w/ 1750 cu. ft. 50-50 Pozmix (8-3/4" hole)  
DV tool @ 8,204'  
Squeezed casing leaks @ 976' and 1328' w/ 800+ sx cmt (8/91)

**Casing Detail:**

18' – 50' KB	20# N-80
50' – 2,204'	17# J-55
2,204' – 7,708'	15.5# J-55
7,708' – 8,605'	17# J-55

**Top of Cement:**

**Target Zones:** Upper Leadville  
**Proposed Perforations:**

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FEB 20 2001

DIVISION OF  
OIL, GAS AND MINING

**Lisbon Unit A-715 Recompletion Procedure  
2620' FNL & 125' FWL, Sec. 15, T30S, R24E  
San Juan County, Utah**

**Recomplete to Upper Leadville:**

1. Notify BLM. Inspect anchors. Set frac tanks for flowback. RU H<sub>2</sub>S 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 4,936' to 8,022'.)
4. ND tree. NU BOPE. Pressure test backside to 1000# for 30 min.
5. Release Guiberson Uni VI mech set HW packer @ 8,098'. TOO H w/ 2-7/8" 6.5# J-55 & L-80 EUE 8rd tubing. Inspect tubing.
6. RU WL. RIH and perforate Mississippian as follows with 4 JSPF, 90° phasing using 4" ported casing guns with 23 g charges (Correlate to Schlumberger Sonic Log run 7/23/65).

INTERVAL	FOOTAGE	JSPF	NO. OF HOLES
8,233' – 8,243'	10	4	40
8,225' – 8,229'	4	4	16
8,208' – 8,216'	8	4	32
8,194' – 8,198'	4	4	16
8,179' – 8,189'	10	4	40
8,109' – 8,113'	4	4	16
	<b>40</b>		<b>160</b>

7. PU and TIH w/ Baker model R-3 DG packer on 2-7/8" tubing. Set packer @ ± 8,050' w/ tubing tail through perms.
8. RU acid equipment. Open packer bypass, spot 5,000 gal 15% SWIC HCl w/ ball sealers and additives. Close bypass and breakdown perms. Flush to top of perforations and flow back until load recovered.
9. Load backside w/ inhibited packer fluid from surface. Pressure test casing and packer to 1,000#.
10. ND BOPE. NU tree.
11. Swab well in. Test to tank. RDMO.

**RECEIVED**

**FEB 20 2001**

**DIVISION OF  
OIL, GAS AND MINING**

8100

100

Miss

81540

605

= 2049

8200

2 SPF  
NOT  
ACIDIZED

8

FILED

FEB 20 2001

DIVISION OF  
OIL, GAS AND MINING



**Tom Brown, Inc.**

**555 Seventeenth Street**

**Suite 1850**

**Denver, CO 80202-3918**

**(303) 260-5000**

**Fax: (303) 260-5001**

**FACSIMILE COVER SHEET**

Transmittal Number: \_\_\_\_\_

Date: 3/12/03 Number of Pages (including cover sheet) 2

To: CHRISTOPHER KIERST

From: BYRON GALE

RECEIVED

MAR 12 2003

DIV. OF OIL, GAS & MINING

Comments: CHRIS - I WILL SOON SEND YOU (THROUGH BUYS & ASSOC)  
AN APPLICATION TO CONVERT LISBON A-715 TO WATER DISPOSAL  
TO TAKE THE PLACE OF THE B-624 ONCE IT'S CONVERTED  
TO SULFUR RE-INJECTION. THE CEMENT TOPS IN ALL

**Confidentiality Statement:** This facsimile transmission may contain confidential information and is intended only for the use of the individual or facility to which it is addressed. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or taking of an action in reliance on the contents of this information is strictly prohibited. If you received this transmission in error, please notify us immediately to arrange for return of the documents. Thank You.

WELLS WITHIN 1/2 MILE RADIUS LOOK GOOD. WE  
RAN THE USIT LOG ON THE A-715 -- BOTH  
CASING AND CEMENT LOOK GREAT. -BYRON GALE

**If you do not receive this transmittal in its entirety, please contact us at (303) 260-5000.**

\*\*\*\*\* FACSIMILE COVER SHEET \*\*\*\*\*

MAR-12-2003 11:22

Message To:

918013593940

Message From:

TOM BROWN DENVER  
303 260 5000

02

Page(s)

Following This Cover Page

**RECEIVED**  
**MAR 12 2003**  
DIV. OF OIL, GAS & MINING

San Juan  
T305 R24E

Lisbon Unit A-715 Area of Review

43-037

Well	Surface/Intermediate Casing				Production Casing						
	Casing	Depth	Cement	Hole	Top of Cement	Casing	Depth	Cement	Hole	Drilling Fluid	Top of Cement
✓ Lisbon A-715 16237	10-3/4" 40.5# J-55	713'	375 cu. ft. 50-50 Pozmix w/ 4% gel, 2% CaCl2 f/b 107 cu. ft. 50-50 Pozmix w/ no gel, 2% CaCl2 <i>Casing leaks in 1991 (problem?) - squeezed</i>	15"	circ to surface	5-1/2" 15.5#, 17#, 20# J-55, N-80	8605'	stage 1: 150 cu. ft. 50-50 Pozmix w/ 2% gel, salt sat stage 2: 1600 cu. ft. 50-50 Pozmix w/ 8% gel, salt sat through DV tool at 8204'	8-3/4"	salt sat.	4537' (calc) 4594' (CBL)
✓ Lisbon B-615 15123	13-3/8" 54.5# J-55	1205'	800 sx 50-50 Pozmix w/ 2% CaCl2 (1.26 cu. ft/sk) <i>Casing leaks in 1990 (problem?) - squeezed</i>	17-3/8"	190' (calc) (full circulation)	7-5/8" 33.7# N-80	9046'	1100 sx 50-50 Pozmix (1.26 cu. ft./sk) f/b 200 sx neat latex (15.8# cmt @ 1.15 cu. ft./sk)	9-7/8"	salt oil emul	4116' (calc)
✓ Lisbon B-815 (P&A'd) 16243	10-3/4" 40.5# J-55	977'	380 sx 50-50 Pozmix w/ 4% gel f/b 140 sx reg cement w/ 2% CaCl2	13-3/4"	circ to surface	5" 18# P-110 & 15# J-55 & 15# N-80	8558'	stage 1: 100 sx 50-50 Pozmix w/ 2% gel (1.26 cu. ft./sk) stage 2: 1000 sx 50-50 Pozmix, salt sat, 8% gel (1.64 cu. ft./sk) through DV tool at 8008'	8-3/4"	salt emul.	surface (calc)
✓ Lisbon D-616 15049	7-5/8" 26.4# N-80	3339'	1290 sx 50-50 Pozmix w/ 6% gel, 3% CaCl2 f/b 150 sx reg cmt w/ 3% CaCl2 & 2% gel <i>looks OK.</i>	8-3/4"	circ to surface	7" 23#, 26#, 29# N-80	9117'	stage 1: 125 sx 50-50 Pozmix, 4% gel, 24# salt/sk (1.54 cu. ft./sk) f/b 150 sx 50-50 Pozmix w/ 2% gel (1.26 cu. ft./sk) stage 2: 1050 sx 50-50 Pozmix w/ 24# salt/sk (1.18 cu. ft./sk) through DV tool at 7761'	8-3/4"	salt base	3250' (temp) 4053' (calc)
✓ Lisbon D-716 31034	13-3/8" 48# H-40	435'	190 sx	16"	circ to surface	5-1/2" 17#, 20# K-55, L-80	8794'	stage 1: 215 sx Class "H" w/ 12% salt, 0.6% Halad-9 (16.1 ppg, 1.08 cu. ft./sk) stage 2: 1000 sx Howco lite w/ 9.9# salt/sk, 0.6% Halad-9 (12.9 ppg, 1.85 cu. ft./sk) f/b 100 sx Class "H" w/ 4.3# salt/sk, 0.8% Halad-9 (16.1 ppg, 1.08 cu. ft./sk) through DV tool at 8155'	8-3/4"	salt mud	3667' (calc)
✓ Lisbon D-816 (P&A'd) 16253	9-5/8" 36# J-55	2580'	125 sx w/ 2-3/4% HA-5 <i>looks OK.</i>	12-1/4"	2180' (calc)	5-1/2" 17#, 20# N-80, J-55	8668'	stage 1: 175 sx 50-50 Pozmix w/ 2% gel (1.26 cu. ft./sk) stage 2: 2200 sx 50-50 Pozmix w/ 6% gel, salt sat. (1.64 cu. ft./sk) through DV tool at 8248'	8-3/4"	salt gel	1575' (calc) 1230' (CBL)
✓ Lisbon D-816 (P&A'd) 16253	10-3/4" 40.5# J-55	974'	400 sx 50-50 Pozmix w/ 6% gel, 2% CaCl2 (1.53 cu. ft./sk) f/b 125 sx reg cement w/ 3% CaCl2 (1.15 cu. ft./sk) <i>problem bad casing (5 1/2") between 6000'-6216' (corrosion &amp; pitting)</i>	13-3/4"	90' (calc)						

P&A 1989 witness Glen Goodwin. possibly collapsed

RECEIVED  
MAR 12 2003  
DIV. OF OIL, GAS & MINING

April 14, 2003

CERTIFIED MAIL:

MINERAL, SURFACE AND WORKING INTEREST OWNERS

RE: NOTIFICATION OF WATER DISPOSAL  
LISBON UNIT A-715  
SWNW SECTION 15, T30S-R24E  
SAN JUAN COUNTY, UTAH

To Whom It May Concern:

On April 14, 2003, we submitted to the Utah Division of Oil, Gas and Mining an application requesting approval to convert the above mentioned well to a water disposal well.

Anyone who would be directly and adversely affected by the authorization of the underground disposal into the Mississippian Leadville formation (8159' to 8496') may file a written request for a public hearing before the Division. Logs and additional information on the subject well are on file with the State of Utah, Division of Oil, Gas and Mining, 1590 W. North Temple, Suite 1210, Salt Lake City, Utah 84114.

Please contact Marty Buys at 303.781.8211 if you have any questions.

Sincerely,



Martin W. Buys  
Agent for Tom Brown, Inc.

U.S. Postal Service  
**CERTIFIED MAIL RECEIPT**  
 (Domestic Mail Only; No Insurance Coverage Provided)

**OFFICIAL USE**

7077  
6003  
0002  
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1140  
0002  
7001

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	<b>\$</b>	
<b>Sent To</b> Bureau Of Land Management		
82 East Dogwood		
Moab, UT 84532		
UIC Application		
PS Form 3800, Ja		

U.S. Postal Service  
**CERTIFIED MAIL RECEIPT**  
 (Domestic Mail Only; No Insurance Coverage Provided)

**OFFICIAL USE**

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Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	<b>\$</b>	
<b>Sent To</b> Tom Brown Inc.		
555 17 <sup>th</sup> Street, Suite 1850		
Denver, CO 80202		
Attn: Larry Lillo		
PS Form 3800, Ja		

U.S. Postal Service  
**CERTIFIED MAIL RECEIPT**  
 (Domestic Mail Only; No Insurance Coverage Provided)

**OFFICIAL USE**

1457  
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1140  
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7001

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Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	<b>\$</b>	
<b>Sent To</b> Chester Gordon Trust		
600 17 <sup>th</sup> St. Suite 1800		
Denver, CO 80202		
Attn: Wayne Gardenswartz		
PS Form 3800, Ja		

U.S. Postal Service  
**CERTIFIED MAIL RECEIPT**  
 (Domestic Mail Only; No Insurance Coverage Provided)

**OFFICIAL USE**

1443  
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0002  
0000  
1140  
0002  
7001

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Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	<b>\$</b>	
<b>Sent To</b> SITLA		
Lavonne Garrison		
675 East, 500 South, Suite 500		
Salt Lake City, Utah 84102		
PS Form 3800, Ja		

April 14, 2003

Mr. Chris Kierst  
State of Utah  
Division of Oil, Gas and Mining  
1594 W. North Temple, Suite 1210  
Salt Lake City, Utah 84114

RE: **UIC PERMIT APPLICATION  
LISBON UNIT A-715  
API # 43-037-16237  
SWNW, SEC. 15 -T30S- R24E  
SAN JUAN COUNTY, UTAH**

**RECEIVED  
APR 16 2003  
DIV. OF OIL, GAS & MINING**

Dear Mr Kierst:

Tom Brown Inc. is planning to convert the above referenced well to a UIC well. This well is an existing well producing from the Mississippian Leadville formation in the Lisbon Field, San Juan County, Utah. TBI is the operator and major working interest owner of wells located in the Lisbon Field, San Juan County, Utah. The Lisbon Field is a unitized field that is managed by the Moab Field office of the BLM.

The Lisbon A-715 well was spudded on 6/8/65. TBI proposes to utilize the Mississippian Leadville formation (the existing SWD zone) as the disposal zone. This formation is also the producing formation. The gross injection interval in the Lisbon A-715 will be from 8159' to 8496'.

Mr Chris Kierst  
April 14, 2003  
Page 2

We discussed this application in our conference call on April 8, 2003. Please contact me directly at 303.781.8211 if you have questions or require any additional information. Thank you for your help with this project.

Sincerely,  
BUYS & ASSOCIATES, INC.



Martin W. Buys  
Agent for Tom Brown Inc.

cc: BLM, Moab Field Office

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

UIC FORM 1

**APPLICATION FOR INJECTION WELL**

Name of Operator Tom Brown Inc.	Utah Account Number N	Well Name and Number Lisbon Unit A-715
Address of Operator 555 17th St.      CITY Denver      STATE CO      ZIP 80202	Phone Number (303) 260-5030	API Number 4303716237
Location of Well  Footage : 2620 FNL & 125 FWL County : SAN JUAN	Field or Unit Name LISBON UNIT	Lease Designation and Number USA U-020691-A
QQ, Section, Township, Range: SWNW 15 30S <sup>24</sup> / <sub>23E</sub> State : UTAH		

Is this application for expansion of an existing project?      Yes       No

Will the proposed well be used for:

Enhanced Recovery?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Disposal?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Storage?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

*UIC-307.1*

Is this application for a new well to be drilled?      Yes       No

If this application is for an existing well, has a casing test been performed?      Yes       No   
Date of test: \_\_\_\_\_

*We should use "Selective Zones" terminology to cite injection interval*  
Proposed injection interval: from 8,159 to 8,496 *← Lisbon Unit A-715*

Proposed maximum injection: rate 2,000 bpd      pressure 1,500 psig

Proposed injection zone contains oil , gas , and / or fresh water  within 1/2 mile of the well.

RECEIVED  
APR 16 2003  
DIV. OF OIL, GAS & MINING

List of attachments: Application, logs, data summary, affidavit

**ATTACH ADDITIONAL INFORMATION AS REQUIRED BY CURRENT  
UTAH OIL AND GAS CONSERVATION GENERAL RULES**

I hereby certify that this report is true and complete to the best of my knowledge.

Name (Please Print) Martin W. Buys      Title Agent for Tom Brown, Inc.  
Signature *Martin W. Buys*      Date 4/11/2003

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

UIC FORM 1

**APPLICATION FOR INJECTION WELL**

Name of Operator Tom Brown Inc.	Utah Account Number N	Well Name and Number Lisbon Unit A-715
Address of Operator 555 17th St. CITY <u>Denver</u> STATE <u>CO</u> ZIP <u>80202</u>	Phone Number (303) 260-5030	API Number 4303716237
Location of Well Footage : 2620 FNL & 125 FWL County : SAN JUAN QQ, Section, Township, Range: <u>SWNW</u> 15 30S <sup>24</sup> / <sub>23E</sub> State : UTAH	Field or Unit Name LIBSON UNIT	Lease Designation and Number USA U-020691-A

Is this application for expansion of an existing project? Yes  No

Will the proposed well be used for:

Enhanced Recovery?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Disposal?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Storage?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

*UIC-307.1*

Is this application for a new well to be drilled? Yes  No

If this application is for an existing well, has a casing test been performed? Yes  No   
Date of test: \_\_\_\_\_

Proposed injection interval: from 8,159 to 8,496 ← *Mississippi Leadville*

Proposed maximum injection: rate 2,000 bpd pressure 1,500 psig

Proposed injection zone contains oil , gas , and / or fresh water  within 1/2 mile of the well.

List of attachments: Application, logs, data summary, affidavit

**RECEIVED**  
**APR 16 2003**  
DIV. OF OIL, GAS & MINING

**ATTACH ADDITIONAL INFORMATION AS REQUIRED BY CURRENT UTAH OIL AND GAS CONSERVATION GENERAL RULES**

I hereby certify that this report is true and complete to the best of my knowledge.

Name (Please Print) Martin W. Buys Title Agent for Tom Brown, Inc.  
Signature *Martin W. Buys* Date 4/11/2003

**UNDERGROUND INJECTION CONTROL**

**PERMIT APPLICATION**

**LISBON UNIT A-715  
SWNW SEC. 15 -T30S- R24E  
SAN JUAN COUNTY, UTAH**

April 14, 2003

*Prepared for:*

*Mr. Chris Kierst  
State of Utah  
Division of Oil, Gas and Mining  
1594 W. North Temple  
Suite 1210  
Salt Lake City, Utah 84114*

*Prepared by:*

***BUYS & ASSOCIATES, INC.  
4720 S. Santa Fe Circle, Suite 6  
Englewood, Colorado 80110  
(303) 781-8211  
FAX (303) 781-1167***

**LISBON UNIT A-715**

**LIST OF ATTACHMENTS**

- Attachment No. 1     Site Map
- Attachment No. 2     Map of Adjacent Wells
- Attachment No. 3     Cross-Section, Structure Map, Completion Data and Summary  
                                 Plugging Data for D-816 & B-815
- Attachment No. 4     Open Hole Log and Cement Bond Log for A-715
- Attachment No. 5     Proposed Completion and Well Bore Diagram
- Attachment No. 6     Water Analysis
- Attachment No. 7     List of Producing Wells
- Attachment No. 8     Ownership Map, List of Owners *Plat for R649-5-2-2.1*
- Attachment No. 9     Affidavit of Notification

## WELL PERMIT APPLICATION

**Lisbon Unit A-715**  
**API # 43-037-16237**

The following document contains information provided in support of the Tom Brown Inc. (TBI) application for the conversion of the Lisbon Unit A-715 to a UIC well in the Mississippian Leadville formation in the Lisbon Field, San Juan County, Utah.

The following document contains information to support this application.

1. TBI is the operator and major working interest owner of wells located in the Lisbon Field, San Juan County, Utah. TBI's business address is provided below:

Tom Brown Inc.  
555 17th Street  
Suite 1850  
Denver, CO 80202  
303.260.5030

2. The Lisbon Unit A-715 well was spudded on 6/8/65.
3. This well will receive produced water that has been separated at the Lisbon Gas Plant. The A-715 well will replace the current UIC well which is the B-624. The B-624 well has been approved to be converted to a acid-gas injection well.

The reservoir studies and additional data that Tom Brown Inc provided in support of the B-624 application is incorporated into this application by reference.

The water injection process within the Lisbon Field has operated successfully since 1965. The two current UIC wells (B-816 & B-624) dispose of approximately 1200-1800 BWPD at low surface injection pressure and there has been no water breakthrough to offset producers.

*→ May obviate need for separate test*

4. Enclosed as Attachment No. 1 (Site Map), is a plat of the A-715.
5. Enclosed as Attachment No. 2 (Site Diagram of Adjacent Wells), is a plat showing that portion of the Lisbon Field in the area adjacent to the Lisbon Unit A-715. The legal

location for the well is 2620' FNL, 125' FWL, Sec. 15, T30S, R24E, San Juan County, Utah.

Shown on the plat is a circle of one-half mile radius centered on the Lisbon Unit A-715 well. The ½ mile radius encompasses the area of the review, within which TBI is required to investigate all wells for mechanical integrity. The ½ mile radius also identifies those lands, the owners thereof, which must be provided notice of this application. There are five other wells in this area. They are the B-615, B-815, D-616, D-716 and the D-816. The B-815 and the D816 are both P&A'd. The four remaining wells are producing.

6. TBI proposes to utilize the Lisbon Unit A-715 as a disposal well for produced water from the Lisbon Gas Plant. This water was produced from wells in the Lisbon Field. The Lisbon Field is a unitized field that is managed by the Moab Field Office of the BLM.
7. TBI proposes to utilize the Mississippian Leadville formation (the existing SWD zone) as the disposal zone. This formation is also the producing formation. The gross injection interval in the Lisbon Unit A-715 will be from 8159' to 8496'.
8. The Lisbon Field is located upon a large faulted anticlinal feature that encompasses approximately 5,000 acres. Structural closure on the field is almost 2,000 feet. When discovered the Lisbon structure was filled to the spill point with hydrocarbons. The northeast boundary of the anticline is bordered by a high angle reverse fault. Displacements on this fault are as much as 2,100 feet. The entire Lisbon anticline is totally encased by the Paradox salt. The A-715 well that is being proposed for water injection is located on the southwest flank of the Lisbon anticline, approximately 1,700 feet to 1,800 feet below to the anticline's crest.

It is proposed that the A-715 well will be utilized in the field as a water injection well. The Mississippian Leadville is the recipient formation. The Leadville Formation is overlain by the Pennsylvanian Molas Formation, a vari-colored shale; the Pennsylvanian Pinkerton Trail Formation, a gray-brown dense dolomite interbedded with anhydrite, gray dolomitic siltstones, and thin gray-green shales; and the Pennsylvanian Paradox Salt, a thick salt containing beds of black shale, dolomite, dolomitic sands and anhydrite. Taken together, any or all of these beds would provide a top seal for the Leadville Formation. The Devonian Ouray Formation, a white, gray, or buff limestone, largely lacking effective porosity and permeability in the Lisbon Field area, underlies the Leadville Formation. The Ouray Formation will form an effective bottom seal at the A-715. The lower 100' +/- of the Leadville Formation in the area of the A-715 is also devoid of effective porosity and permeability and would serve to re-enforce a bottom seal.

9. Attachment No. 3 contains a structure map and cross-section. A completion summary and data for the 6 wells in the review area is also contained in Attachment No. 3.

Byron Gale, the project engineer, has calculated the cement tops in all 6 wells. The calculated cement tops correspond very well in the 2 well bores where CBLs are available. TBI believes that the calculated cement tops show that integrity will be adequate in this injection operation.

*\* 3 of the wells in the A-715 have had casing leaks or problems @ 5/23/03*

10. Attachment No. 4. contains a copy of the Schlumberger Ultra Imaging Tool log and cement bond log. These 2 logs were run in January 2003 for the Lisbon A-715.

Plugging information for the D-816 and the B-815 is also included in Attachment No. 4.

The write up for the completion of the Lisbon Unit A-715 and the wellbore diagram is included in Attachment No. 5.

11. The source of water for disposal in the Lisbon Unit A-715 will be from the wells in the Lisbon Field that have been processed in the Lisbon Gas Plant. Enclosed as Attachment No. 6 are standard analyses of formation produced water.

Various produced water samples were mixed with each other and formation water. The water Deposition Potential Indicators analysis shows that there is little scaling potential in the mixed waters.

The analysis of the Mississippian Leadville water from the Lisbon B-912 is 110,032 mg/L of total dissolved solids. This is above the 10,000 ppm value utilized by the Board as the upper threshold for "fresh water." There are no sources of underground drinking water near the Lisbon Unit A-715.

12. A list of wells that may use the Lisbon Unit A-715 well for disposal is included in Attachment No. 7.

13. The maximum injection volume in the Lisbon Unit A-715 is estimated to be 2000 BWPD. The estimated injection pressure is 1500 psig at the surface.

14. Enclosed as Attachment No. 8 is a list of all the owners, operators, and surface interest owners located within ½ mile radius of the Lisbon Unit A-715.

SURFACE OWNERS	MINERAL OWNERS
Federal - BLM	Federal - BLM
State of Utah - SITLA	State of Utah- SITLA
Tom Brown Inc.	Chester Gordon Trust
	Tom Brown Inc.

The affidavit certifying that TBI has notified all of the operators, owners, and surface interest owners located within ½ mile radius of the Lisbon Unit A-715 well is located in Attachment No. 9

**ATTACHMENT NO. 1**

**SITE MAP**

649,000

650,000

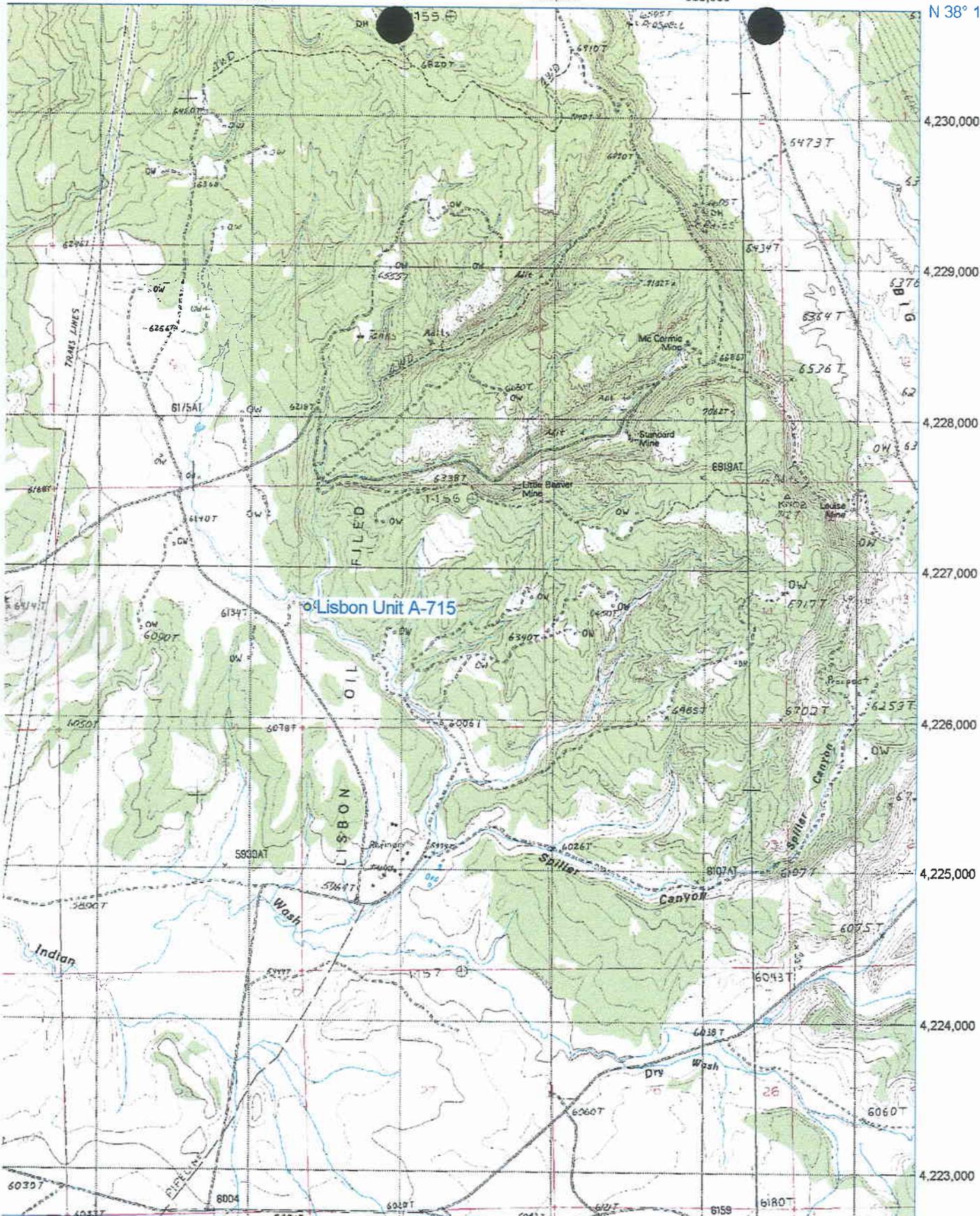
651,000

652,000

653,000

W 109° 14' 11.116"

N 38° 12' 47.182"



Lisbon Unit A-715

4,230,000

4,229,000

4,228,000

4,227,000

4,226,000

4,225,000

4,224,000

4,223,000

649,000

650,000

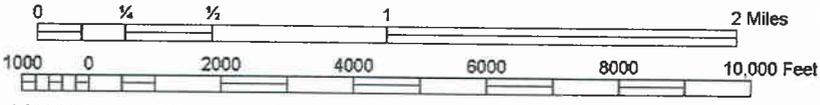
651,000

652,000

653,000

N 38° 8' 26.221"

W 109° 14' 17.404"



Lisbon Unit A-715

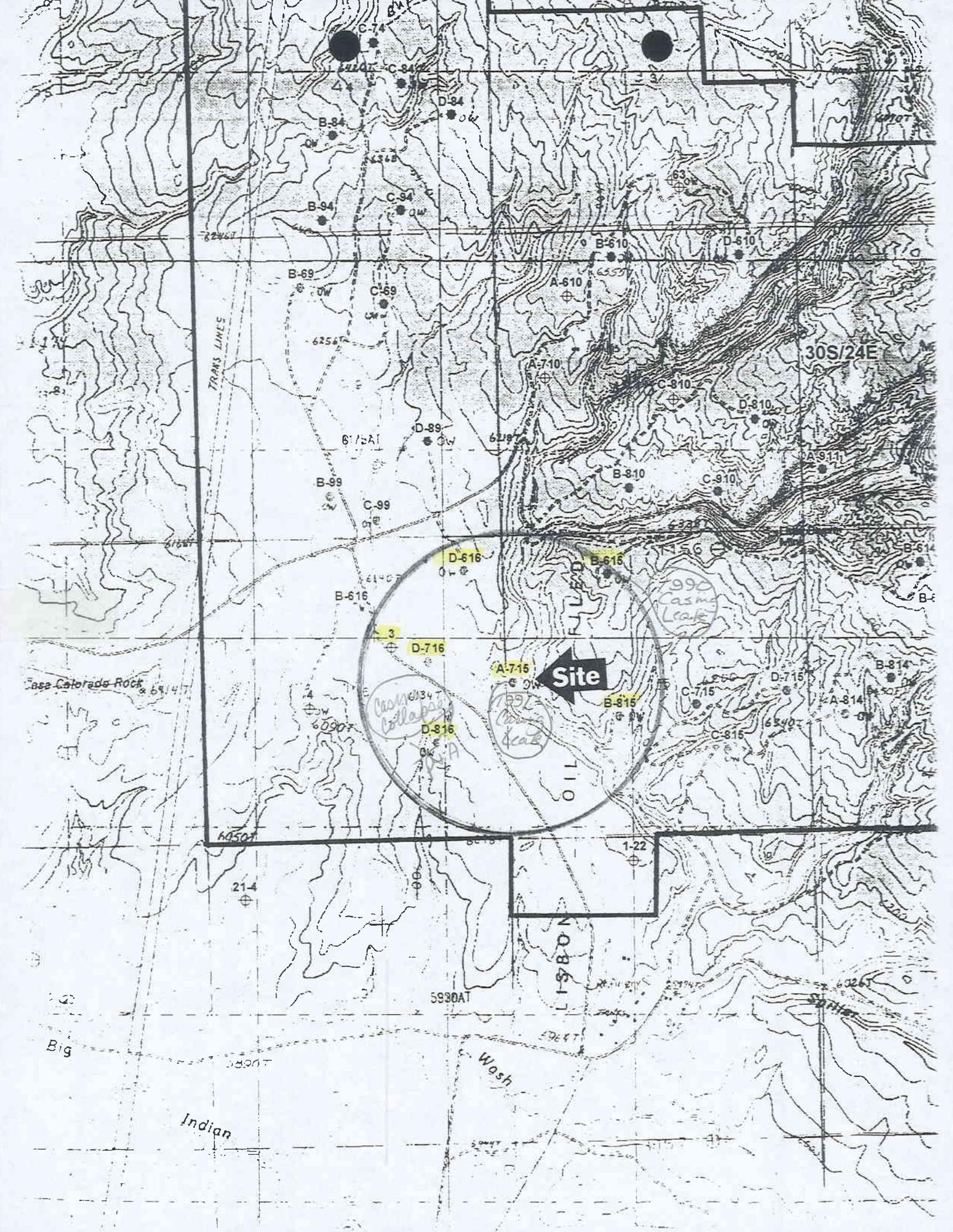
"bigtest.it3"; Scale: 1" = 0.548Mi 882Mt 2,895Ft, 1 Mi = 1.824", 1 cm = 347Mt 2 Kilometers



BioTopo Map

**ATTACHMENT NO. 2**

**MAP OF  
ADJACENT WELLS**

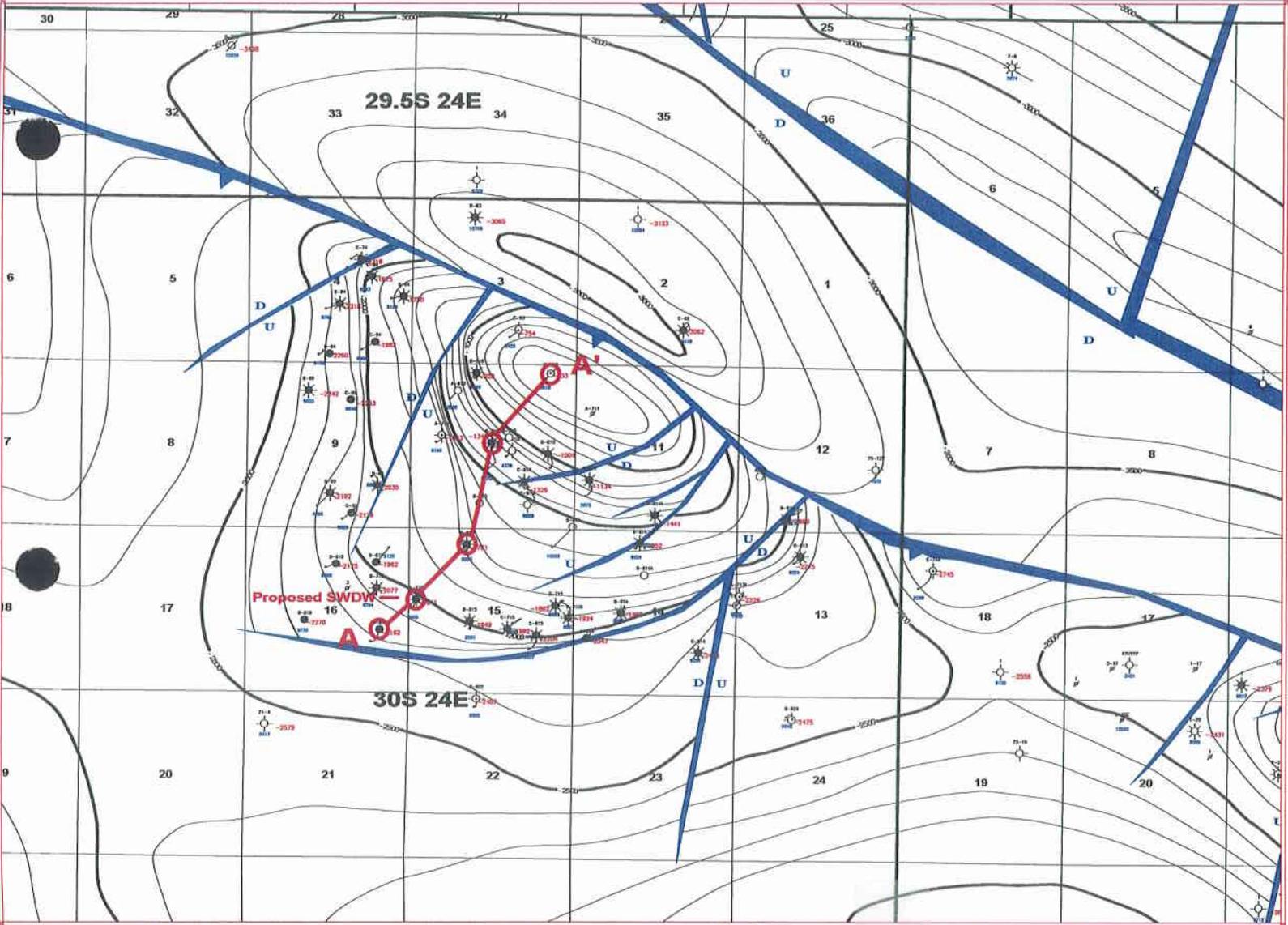


**ATTACHMENT NO. 3**

**CROSS-SECTION, STRUCTURE MAP,  
COMPLETION DATA**

# Lisbon Field

San Juan County, Utah



Structure top of Mississippian

**A**

43037162530000

1526 ft

43037162370000

PURE OIL CO  
LISBON UNIT D-816  
01620FSL 01220FEL

UNOCAL  
LISBON UNIT A-7  
02620FNL 00125F

TWP: 30 S - Range: 24 E - Sec. 16

TWP: 30 S - Range: 24 E

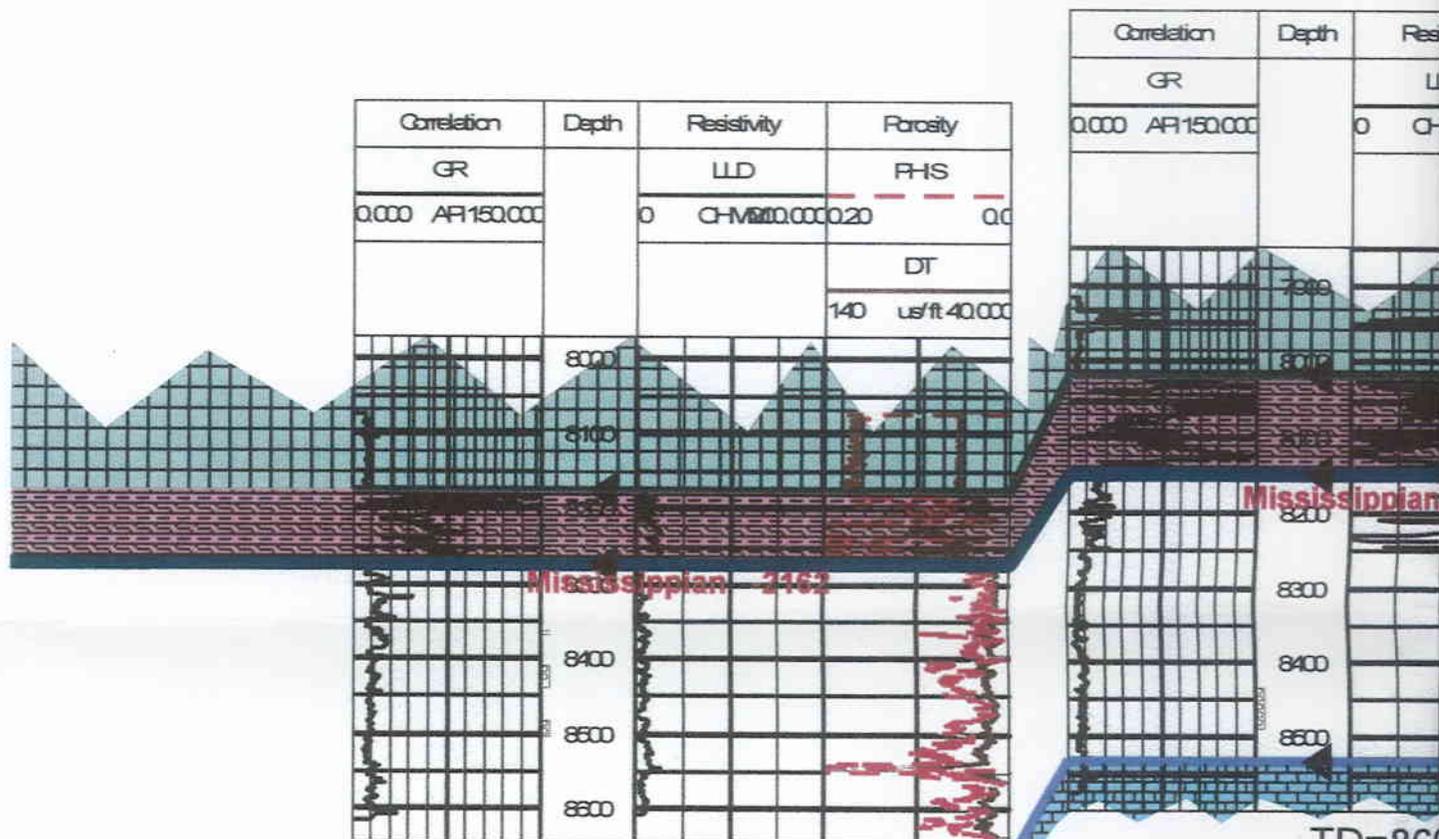
-500

-1000

-1500

-2000

-2500



Correlation	Depth	Resistivity	Porosity
GR		LLD	FHS
0.000 AF150.000		0 CH-M 0.000 0.20	0.00
			DT
			140 us/ft 40.000
	8000		
	8100		
	8400		
	8600		
	8800		

Correlation	Depth	Resistivity
GR		LLD
0.000 AF150.000		0 CH-M 0.000 0.20
		DT
		140 us/ft 40.000
	7800	
	8000	
	8100	
	8200	
	8300	
	8400	
	8600	

TD=8666

TD=8666

**Proposed**

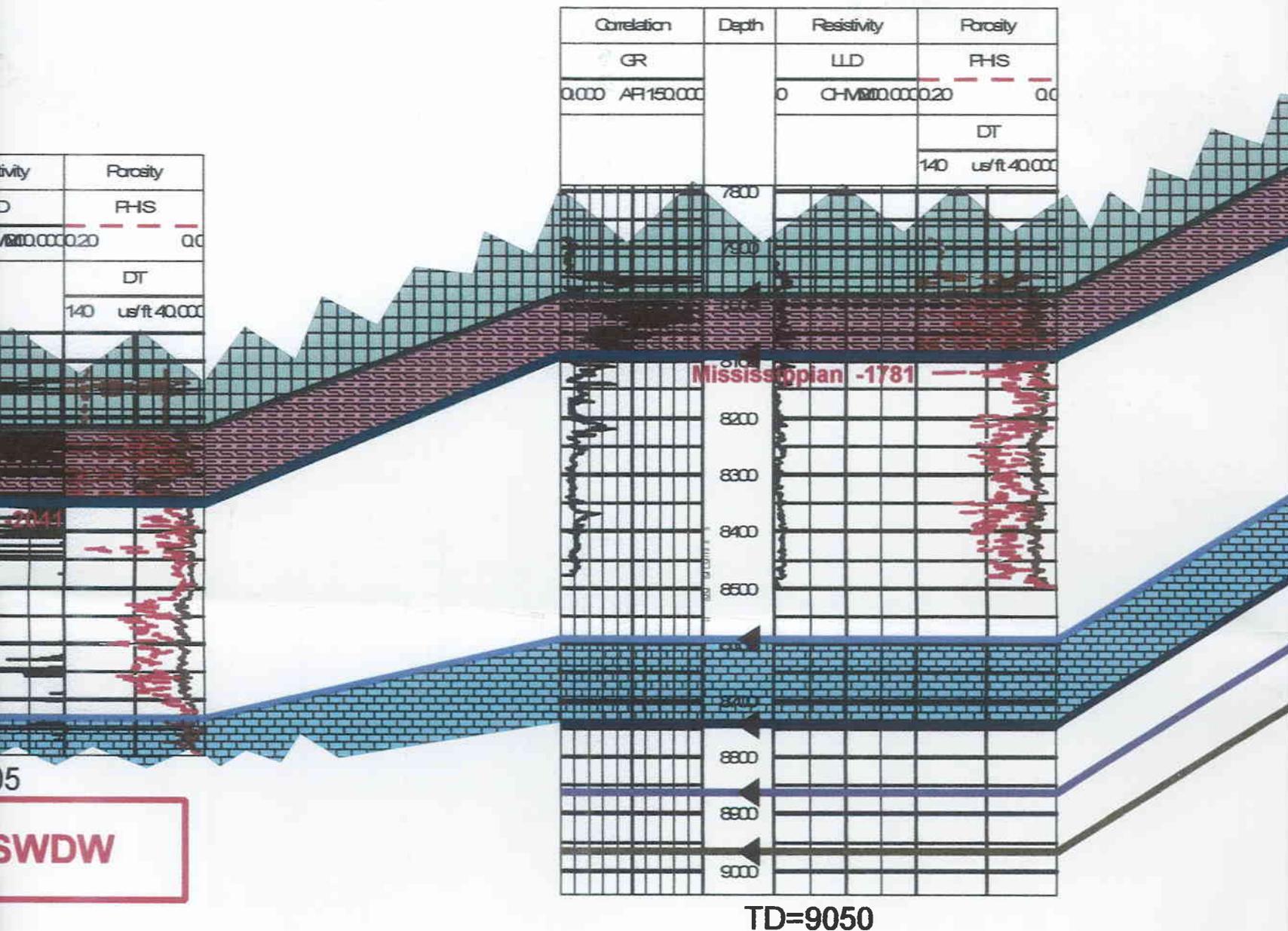
2410 ft

43037151230000



UNOCAL  
ARNOLD 21-15 (LISBON) B-615  
00765FNL 01840FWL  
TWP: 30 S - Range: 24 E - Sec. 15

15  
WL  
- Sec. 15

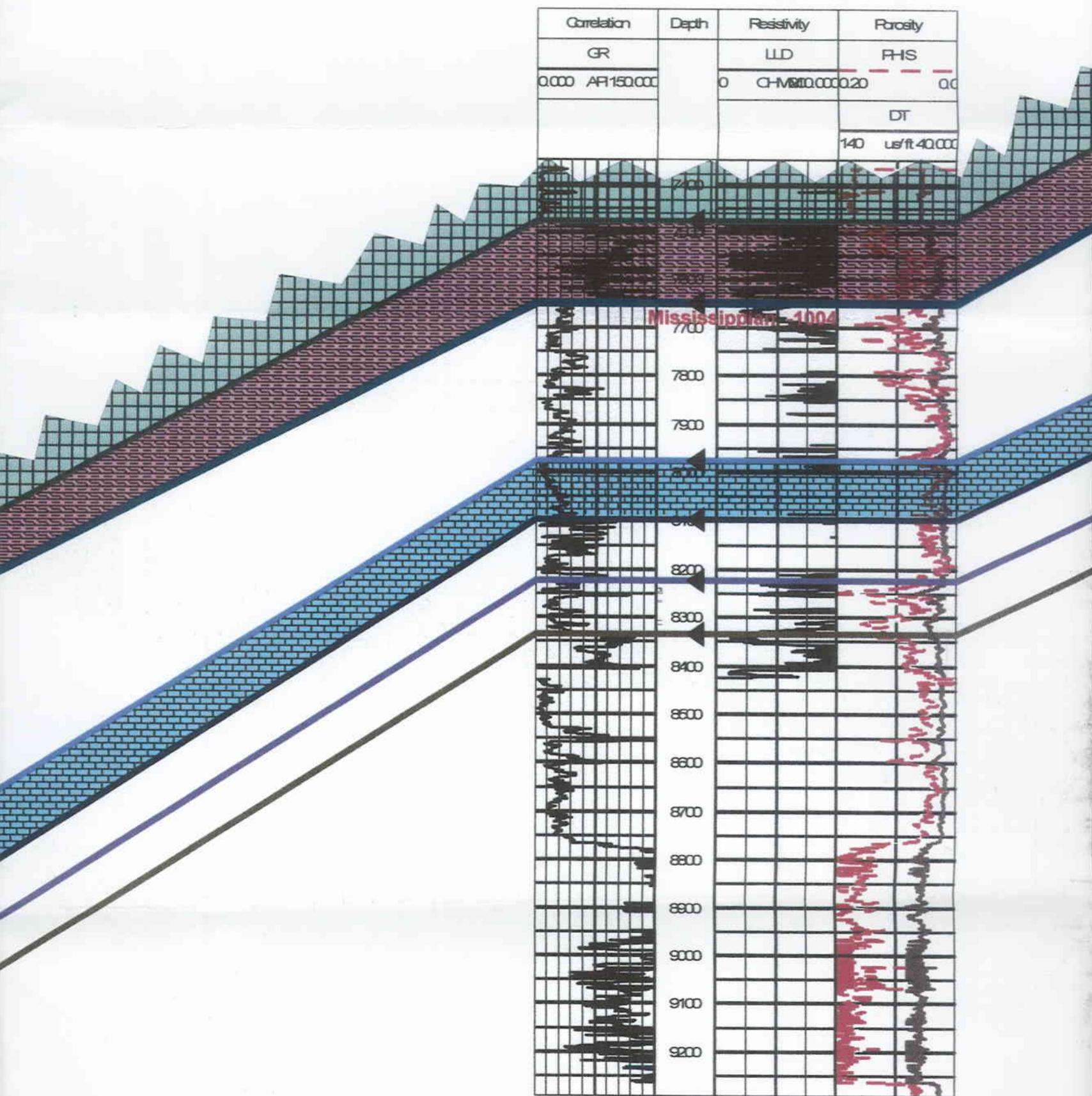


3877 ft

43037164710000

27

UNOCAL  
NW LISBON USA A D-810  
01895FSL 00755FEL  
TWP: 30S - Range: 24E - Sec. 10



TD=9310

3 ft

43037306940000

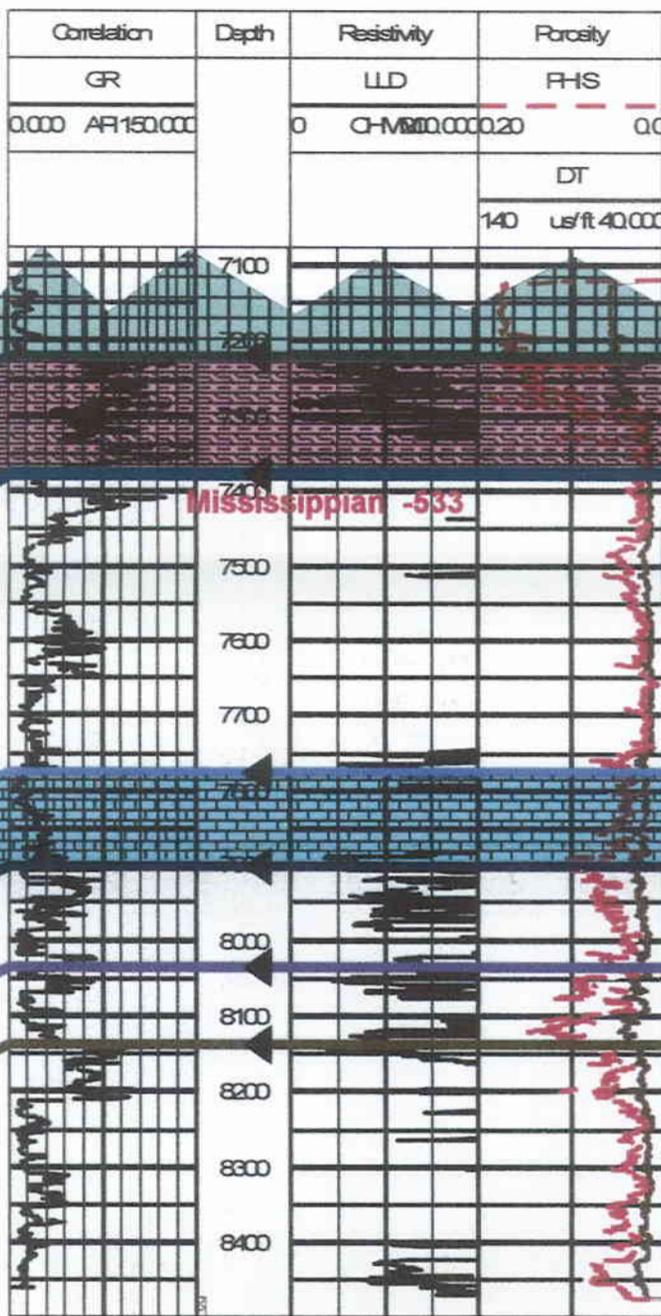
UNOCAL

LISBON UNIT D-610

00565FNL 00964FEL

TWP: 30 S - Range: 24 E - Sec. 10

A'



TD=8510

-500

-1000

-1500

-2000

-2500

# Lisbon Unit A-715 Area of Review

Rick Starnby  
 (303) 329-0061  
 Date: 11/13/2013

16237  
 16243  
 15049  
 31034  
 16253

Well	Surface/Intermediate Casing			
	Casing	Depth	Cement	Hole / Top of Cement
Lisbon A-715 Producing	10-3/4" 40.5# J-55	713'	375 cu. ft. 50-50 Pozmix w/ 4% gel, 2% CaCl2 f/b 107 cu. ft. 50-50 Pozmix w/ no gel, 2% CaCl2	15" circ to surface
Lisbon B-615 Producing	13-3/8" 54.5# J-55	1205'	800 sx 50-50 Pozmix w/ 2% CaCl2 (1.26 cu. ft./sk)	17-3/8" 190' (calc) (full circulation)
Lisbon B-815 (P&A'd)	10-3/4" 40.5# J-55	977'	380 sx 50-50 Pozmix w/ 4% gel f/b 140 sx reg cement w/ 2% CaCl2	13-3/4" circ to surface
	7-5/8" 26.4# N-80	3339'	1290 sx 50-50 Pozmix w/ 6% gel, 3% CaCl2 f/b 150 sx reg cmt w/ 3% CaCl2 & 2% gel	8-3/4" circ to surface
Lisbon D-616 Producing	13-3/8" 48# H-40	435'	190 sx	16" circ to surface
	9-5/8" 36# J-55	2580'	125 sx w/ 2-3/4% HA-5	12-1/4" 2180' (calc)
Lisbon D-716 Producing	9-5/8" 36# K-55	1001'	600 sx Class "B" w/ 2% CaCl2 and 1% Halad-9 (15.6 ppg, 1.18 cu. ft./sk)	12-1/4" circ to surface
Lisbon D-816 (P&A'd)	10-3/4" 40.5# J-55	974'	400 sx 50-50 Pozmix w/ 6% gel, 2% CaCl2 (1.53 cu. ft./sk) f/b 125 sx reg cement w/ 3% CaCl2 (1.15 cu. ft./sk)	13-3/4" 90' (calc)

Production Casing					
Casing	Depth	Cement	Hole	Drilling Fluid	Top of Cement
5-1/2" 15.5#, 17#, 20# J-55, N-80	8605'	stage 1: 150 cu. ft. 50-50 Pozmix w/ 2% gel, salt sat stage 2: 1600 cu. ft. 50-50 Pozmix w/ 8% gel, salt sat through DV tool at 8204'	8-3/4" salt sat.		4537' (calc) 4594' (CBL)
7-5/8" 33.7# N-80	9046'	1100 sx 50-50 Pozmix (1.26 cu. ft./sk) f/b 200 sx neat latex (15.8# cmt @ 1.15 cu.ft./sk)	9-7/8" salt oil emul		4118' (calc)
5" 18# P-110 & 15# J-55 & 15# N-80	8556'	stage 1: 100 sx 50-50 Pozmix w/ 2% gel (1.26 cu. ft./sk) stage 2: 1000 sx 50-50 Pozmix, salt sat, 6% gel (1.64 cu. ft./sk) through DV tool at 8008'	6-3/4" salt emul.		surface (calc)
7" 23#, 26#, 29# N-80	9117'	stage 1: 125 sx 50-50 Pozmix, 4% gel, 24# salt/sk (1.54 cu. ft./sk) f/b 150 sx 50-50 Pozmix w/ 2% gel (1.26 cu. ft./sk) stage 2: 1050 sx 50-50 Pozmix w/ 24# salt/sk (1.18 cu. ft./sk) through DV tool at 7761'	8-3/4" salt base		3250' (temp) 4053' (calc)
5-1/2" 17#, 20# K-55, L-80	8794'	stage 1: 215 sx Class "H" w/ 12% salt, 0.6% Halad-9 (16.1 ppg, 1.08 cu. ft./sk) stage 2: 1000 sx Howco lite w/ 9.9# salt/sk, 0.6% Halad-9 (12.9 ppg, 1.85 cu. ft./sk) f/b 100 sx Class "H" w/ 4.3# salt/sk, 0.6% Halad-9 (16.1 ppg, 1.08 cu. ft./sk) through DV tool at 8155'	8-3/4" salt mud		3667' (calc)
5-1/2" 17#, 20# N-80, J-55	8666'	stage 1: 175 sx 50-50 Pozmix w/ 2% gel (1.26 cu. ft./sk) stage 2: 2200 sx 50-50 Pozmix w/ 6% gel, salt sat. (1.64 cu. ft./sk) through DV tool at 8248'	8-3/4" salt gel		1575' (calc) 1230' (CBL)

**ATTACHMENT NO. 4**

**OPEN HOLE LOG AND CEMENT BOND LOG FOR A-715**

**PLUGGING INFORMATION FOR D-816 AND THE B-815**

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

SUBMIT IN TRIPPLICATE\*  
(Other instructions on reverse side)

5. LEASE DESIGNATION AND SERIAL NO.  
Utah ML 13692

**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.)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

1. <b>OIL WELL</b> <input checked="" type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/> <b>P&amp;A</b>		7. UNIT AGREEMENT NAME Lisbon	
2. NAME OF OPERATOR Union Oil Company of California		8. FARM OR LEASE NAME Lisbon Unit	
3. ADDRESS OF OPERATOR P. O. Box 2620 - Casper, WY 82602-2620		9. WELL NO. D-816	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  1620' FSL & 1220' FEL (NE SE)		10. FIELD AND POOL, OR WILDCAT Lisbon	
14. PERMIT NO. API No. 43-037-16253		15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6086' GR (Ungraded)	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 16, T.30S., R.24E.	12. COUNTY OR PARISH San Juan
			13. STATE Utah

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"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input 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.)\*

MIRU well service unit on 12-20-88. Blew well down and killed with 80 bbls. water down casing. N.D. tree and N.U. BOP. Tested BOP to 2000 psi. RIH to 6250'. Stopped at possible collapsed casing and could not work down. Attempted to circulate without success. TOOH. RIH with cement retainer and set at 5992'. Established injection rate of 3-1/2 bpm at 100# and pumped 290 sacks of cement. Stung out of retainer and dumped 10 sacks of cement on top of retainer. Rolled hole with mud-laden fluid. Perforated from 2550-2551' with 4 spf. TIH with cement retainer, setting at 2400'. Pressured annulus to 1000 psi. Attempted to inject into perforations with 5000 psi with no success. Stung out of retainer and spotted 50 sacks of cement on top of retainer. Perforated from 950-951' with 4 spf. RIH with cement retainer on tubing, setting at 640'. Pumped 250 sacks of cement below retainer. Stung out of retainer and spotted 20 sacks of cement on top of retainer. Pumped 25 sacks of cement down 5-1/2" x 10-3/4" annulus. Cut off wellhead. Installed surface plug in 5-1/2" casing with redi-mix cement and filled up top 2' of 5-1/2" x 10-3/4" annulus with redi-mix cement. Installed dry hole marker. Well plugged and abandoned on 12-28-88.

Note: Abandonment operations were witnessed by Glenn Goodwin, Utah State Inspector. Mr. Goodwin said that the location must be ripped and reseeded only and does not need to be restored to the original topography. A sundry notice will be submitted as soon as the location is ready for final inspection.

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

SIGNED <u>John R. Underhill</u>	TITLE <u>District Drilling Supt.</u>	DATE <u>1-6-89</u>
(This space for Federal or State office use)		
APPROVED BY <u>ACCEPTED</u>	TITLE <u>Branch of Fluid Minerals Moab District</u>	DATE <u>JAN 18 1989</u>
CONDITIONS OF APPROVAL, IF ANY:		

*accept JHM  
1/18/89*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
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.  
**U-09179**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

**Lisbon Unit**

8. Well Name and No.

**Lisbon Unit #B-815**

9. API Well No.

**43-037-16243**

10. Field and Pool, or Exploratory Area

**Lisbon (Miss.)**

11. County or Parish, State

**San Juan, Utah**

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well     Gas Well     Other

2. Name of Operator

**Union Oil Company of California**

3. Address and Telephone No.

**P. O. Box 671--Midland, TX 79702    (915) 685-7607**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**2020' FSL & 1980' FWL  
NESW    Sec. 15, T30S, R24E**

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input checked="" type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

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 drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

*See attached Plugging Report.*

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

Signed Charlotte Beeson

Title Regulatory Clerk (915) 685-7607

Date 11-6-97

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

\*See Instruction on Reverse Side

Well Name: LISBON (MISS) LISBON UNIT-B-815 Page: 11

10/2/97 TO PLUG & ABANDON (AFE 127365)  
SPIRIT ENERGY 76'S WI: 73.63%

(FREUND) MIRU BIG "A" RIG #8. SPTD PUMP UNIT & TRAILER. WILL SPOT FRAC TANKS & PIPE RACKS TOMORROW.  
SDON.

10/3/97 (FREUND) FIN RU BIG "A" RIG #8. HELD SAFETY MTG & CONDUCTED RIG INSPECTION. OPENED WELL. NO PRESS & NO FLOW. PUMPED 45 BBLs BRINE TO KILL WELL. ND WH & NU BOP. F-TESTED BOP. LOADED CSG ANNULUS W/ 65 BBLs BRINE & PUMPED 2 BPM @ 550 PSI. SD & PRESS BLEED TO ZERO IN LESS THAN 1 MIN. REPEATED P-TEST W/ SAME RESULT. REL PKR & STRAPPED OUT OF HOLE W/ TBG & GUIB UNI VI 5" X 2-3/8" PKR. PU BAKER MOD K-1 5" X 2-3/8" RET. RIH & HIT TIGHT SPOT @ 3578'. STUCK PKR. WORKED LOOSE. SET 175M# ON PKR & PUMPED 65 BBLs BRINE W/ CIRC @ SURF FROM TBG. POH. REC TBG & SETTING TOOL. SWI-SDON DUE TO DARKNESS & HVY ELECTRICAL RAIN STORM.

10/4/97 (FREUND) 24 HR SIP 0 PSI. LOADED HOLE W/ BRINE & P-TESTED CSG TO 500 PSI. PRESS HELD INDICATING BRIDGE PLUG IS SET & THAT THE CSG IS GOOD TO 3578'. SWI-SDOWE - WAITING ON POWERED SWIVEL TO ARRIVE MONDAY.

10/7/97 (FREUND) OPENED WELL. NO SIP. PU BOT METAL MUNCHER (4-1/8"). RIH & MILLED CMT RET IN 1-1/4 HRS. PUSHED RET 20 STDS. POH. LD MILL & RIH W/ WS OE'D. PUSHED RET TO 8340'. TRICKLED BRINE IN ANNULUS DURING TRIP. MIXED 185 SX CL "G" W/ 1% CaCl<sub>2</sub> & SPTD @ 8340'. WELL ON VAC. POH TO 7210'. CLEARED TBG W/ BRINE.  
SWI-SDON.

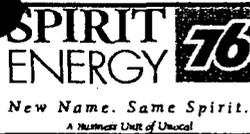
10/8/97 (FREUND) OPENED WELL & FOUND TBG STUCK. RIH W/ WL & TAGGED TOP OF CMT @ 5694'. LOADED ANNULUS W/ BRINE & P-TESTED TO 500 PSI, PRESS HELD. RIH W/ JET CUTTER & CUT TBG @ 5689'. ATT TO POH & WL STUCK. WORKED LINE & UNABLE TO FREE. SI ANNULUS.  
SDON.

10/9/97 (FREUND) UNABLE TO LOCATE WL CUTTER. WORKED LINE & PARTED W/ 1700# TENSION. LEFT 47' WL & JET CUTTING TOOLS IN HOLE. POH, REC 181 JTS + 1 CUT PC (5678.56') TBG. LEFT 49 JTS (1537.29') TBG CMT'D IN HOLE. RIH OE'D TO 4672'. SPTD PLUG #2 (30 SX) @ 4672-4345'. PU & SPTD PLUG #3 (33 SX) @ 3388-3008. PLUG #4 (32 SX) @ 1064-716' & PLUG #5 (10 SX) @ 100'-SURF.  
SDON.

10/10/97 (FREUND) FIN CUT OFF WH. RDMO RIG TO LISBON UNIT #A-814. OFF REPORT. EST TTL COST: \$22,371.

NOTE: P&A MARKER WILL BE INSTALLED SIMULTANEOUSLY W/ MARKER FOR LISBON UNIT A-814.

ASSET GROUP: PB/RM  
 FIELD: Mississippian  
 LEASE/UNIT: Lisbon Unit  
 COUNTY: San Juan

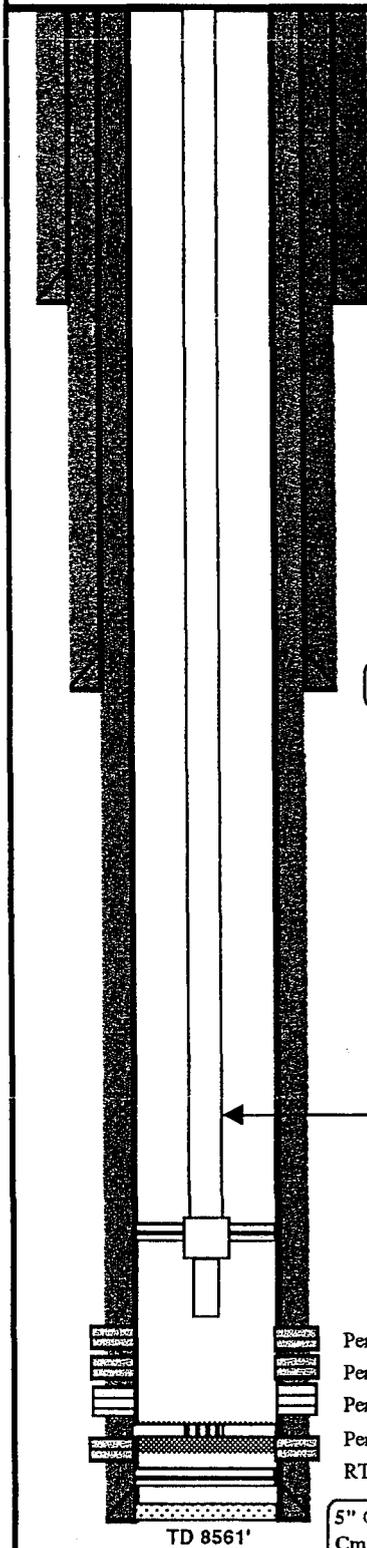


DATE: Apr. 24, 1997  
 BY: M.C. Phillips  
 WELL: B-815  
 STATE: Utah

SPUD DATE: 5/15/62  
 COMP. DATE: 7/23/62  
 STATUS: Shut-in

KB = 6,102'  
 Elevation = 6,089'  
 TD = 8,561'  
 PBTD = 8,427'

**BEFORE P&A**



10-3/4" @ 977'. 40# 8rd ST&C csg. Cmt'd w/520sx. Cmt'd Circ.

Formation Tops	
Salt Top	4625
Salt Base	7985
Mississippian	8074

7-5/8" @ 3,339'. 26.4# N-80 LT&C csg. Cmt'd w/1440 sx. Cmt'd Circ.

1

Tubing	2-3/8" 4.7#, J-55 EUE 8rd	257jts	8,058.28'
SN	2-3/8" X 1.78" ID	1	1.10'
Tubing	2-3/8" 4.7#, J-55 EUE 8rd	1jt	31.28'
On/Off	1.78" ID profile	1	2.10'
PKR	Gulb Uni-VI 5" X 2-3/8"	1	6.80'
Tubing	2-3/8" 4.7#, J-55 EUE 8rd	8jts	251.06'
Nipple	2-3/8" X 1.78" R-nipple	1	0.80'
<b>TOTAL</b>			<b>8,351.42'</b>
<b>KB</b>			<b>12.00'</b>
<b>FHD</b>			<b>8,363.42'</b>

Perfs 8,151-8,185'. Sqz'd 8/92.  
 Perfs 8,297-8,322'. Sqz'd 8/92.  
 Perfs 8,342-8,410'. Open.  
 Perfs 8,440-8,452 Sqz'd 8/92 Ret @ 8,429'.  
 RTBP Bkr Mdl "C" @ 8,485'

5" @ 8,556'. 18# 15# P-110, N-80 J-55 LT&C csg. Cmt'd 2 stages 100sx, FB 1000sx thru DV @ 8,008'.  
 Cmt Circ.

TD 8561'

ASSET GROUP: PB/RM  
FIELD: Mississippian  
LEASE/UNIT: Lisbon Unit  
COUNTY: San Juan

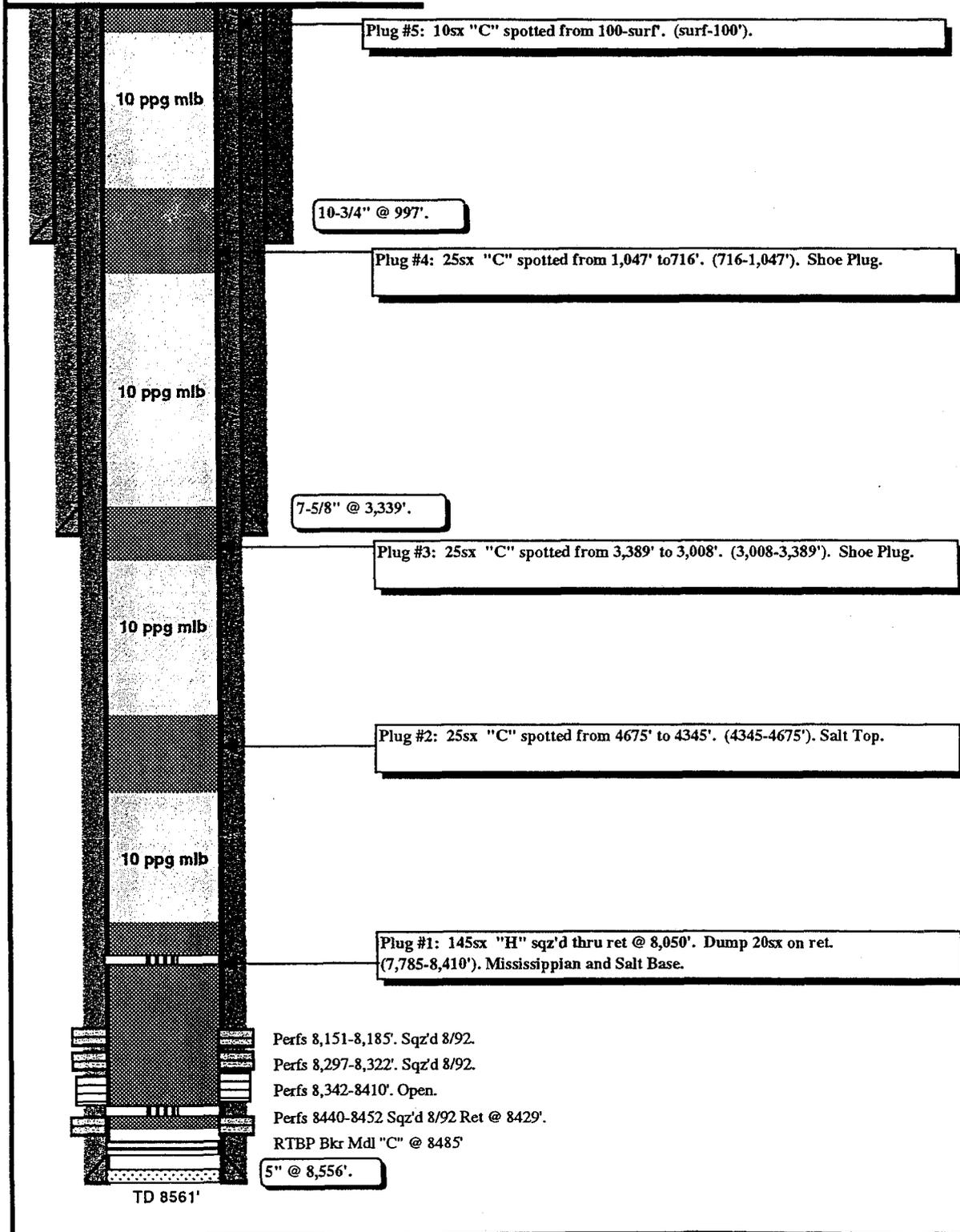
**SPIRIT ENERGY 76**  
New Name. Same Spirit.  
A Business Unit of Unocal

DATE: Apr. 24, 1997  
BY: M.C. Phillips  
WELL: B-815  
STATE: Utah

SPUD DATE: 5/15/62  
COMP. DATE: 7/23/62  
STATUS: Shut-in

KB = 6,102'  
Elevation = 6,089'  
TD = 8,561'  
PBD = 8,427'

**AFTER P&A**



**ATTACHMENT NO. 5**

**PROPOSED COMPLETION AND WELLBORE DIAGRAM**

**Tom Brown, Inc.**  
**Well Conversion Procedure**  
**March 14, 2003**

**Lisbon Unit A-715**  
**2620' FNL & 125' FWL, Sec. 15-T30S-R24E**  
**Lisbon Field**  
**Paradox Basin**  
**San Juan County, Utah**

**Prepared by:** Byron R. Gale  
**Office:** 303-260-5036  
**Cell:** 303-819-7318  
**Fax:** 720-946-5436  
**Home:** 303-674-9600  
**E-mail:** bgale@tombrown.com

**AFE Number:** 40221  
**API Number:**

TBI Working Interest: 99.50%  
TBI Net Revenue Interest: 84.84%

Spud Date: 6/8/65  
Rig Release Date: 7/23/65

TD: 8,605'  
PBTD: FC @ 8,570' / CIBPs @ 8295' and 8435'  
GL elevation: 6,089'  
KB elevation: 6,105'

Surface Casing: 10-3/4", 40.5#, J-55, set @ 713'  
Cmt'd w/ 375 ft<sup>3</sup> 50-50 Poz w/ 4% gel & 2% CaCl<sub>2</sub> f/b  
107 ft<sup>3</sup> 50-50 Poz w/ no gel and 2% CaCl<sub>2</sub> (15" hole)  
Circulated to surface

Production Casing: 5-1/2", 15.5#, 17#, 20# J-55 & N-80 casing, set @ 8,605'  
Cmt'd Stage 1: 150 ft<sup>3</sup> 50-50 Poz w/ 2% gel, salt sat  
Stage 2: 1600 ft<sup>3</sup> 50-50 Poz w/ 8% gel, salt sat thru DV tool  
@ 8204' (8-3/4" hole)

Casing Detail: 18' - 50' KB 20# N-80  
50' - 2,204' 17# J-55  
2,204' - 7,708' 15.5# J-55  
7,708' - 8,605' 17# J-55

Top of Cement: 4,594' from Schlumberger CBL run 1/28/03

(cont'd)

Target Zones: Mississippian (Leadville)

Formation Tops: Hermosa 3168', Top Salt 4936', Base Salt 8022',  
Molas 8122', Leadville 8126', Miss Dolomite Porosity 8326'

Current Perforations: 8159'-63', 8179'-89', 8194'-98', 8208'-16', 8225'-29', 8233'-43' @  
4 SPF 2/01; 8233'-8243', 8250'-54' @ 2 SPF 8/91; CIBP @ 8295'  
w/ 10' cmt 10/97; 8326'-8420' @ 2 SPF 8/91; CIBP @ 8435' 8/91;  
8442'-96' @ 2 SPF 8/65

Tubing: 2-7/8" EUE 8rd @ 8119' w/ packer @ 8113'

Max Recorded Temp. 130° F

**Lisbon Unit A-715 Conversion Procedure  
2620' FNL & 125' FWL, Sec. 15, T30S, R24E  
San Juan County, Utah**

**Convert to Water Disposal Well:**

**WELL PREPARATION**

1. Shut-in well and rig down plunger equipment.
2. Notify BLM at least 24 hours prior to commencing operations. Inspect anchors. Set frac tanks for flowback. RU H<sub>2</sub>S safety equipment.
3. MIRU DD PU. Hold rig inspections and pre-job safety meeting.
4. Kill well w/ water. Keep wellbore loaded throughout job. ND WH and NU BOPE.
5. RU for pressure test. Pressure test casing to 3,000 psi for 20 min. Bleed pressure off casing.
6. Release packer at 8113' and TOO H w/ 2-7/8" tubing and packer.
7. Change out wellhead for 3-1/2" tubing.
8. RU foam unit and PU bit on 2-7/8" tubing. TIH and drill out CIBPs at 8295' and 8435'. TOO H and LD 2-7/8" tubing.

**RE-PERFORATE LEADVILLE**

9. RU WL. RU lubricator. RIH and perforate Leadville as follows at 2 JSPF, 120° phasing w/ 3-3/8" expendable casing guns loaded w/ 23g charges correlating to Schlumberger USIT/CBL log run 1/28/03. POOH and verify all shots fired.

INTERVAL	FOOTAGE	JSPF	NO. OF HOLES
8,442' – 8,496'	54	2	108
8,326' – 8,420'	94	2	188
	<b>148</b>		<b>296</b>

10. RIH w/ WL-set 5-1/2" x 3-1/2" permanent packer and set at ± 8100'.
11. Bleed off pressure. PU and TIH w/ 3-1/2" 9.3# J-55 IPC tubing.
12. Sting tbg into pkr. Pressure test packer to 1000#.

**ACIDIZE LEADVILLE**

13. RU acid equipment. Pump 15,000 gal 15% SWIC HCl w/ additives per recommended procedure. Flush to top of perforations.

14. Load backside w/ inhibited packer fluid from surface. Pressure test casing and packer to 1,000#.
15. ND BOPE. NU tree.
16. RDMO. Turn over to production to put well on permanent water disposal.

## Job Contacts

### Tom Brown, Inc. Contacts:

Byron Gale	Operations Engineer, Denver	303-260-5036 office 303-819-7318 cell 303-674-9600 home
Jerry Holder	TBI Rig Supervisor	970-261-0218 cell 970-263-5409 office
Greg Olson	Drilling Engineer, Denver	303-260-5068 office 303-819-7313 cell
Randy Koliba	Plant Manager, Lisbon	970-263-5402 office 970-250-6332 cell
Rick Costanza	Production Supervisor, Lisbon	435-686-7612 office 435-260-1671 cell
Cindy Turner	Materials, Denver	303-260-5026 office
Harry Held Brent Miller	Geologist, Denver Geophysicist, Denver	303-260-5041 office 303-260-5050 office
Larry Lillo	Landman, Denver	303-260-5127 office

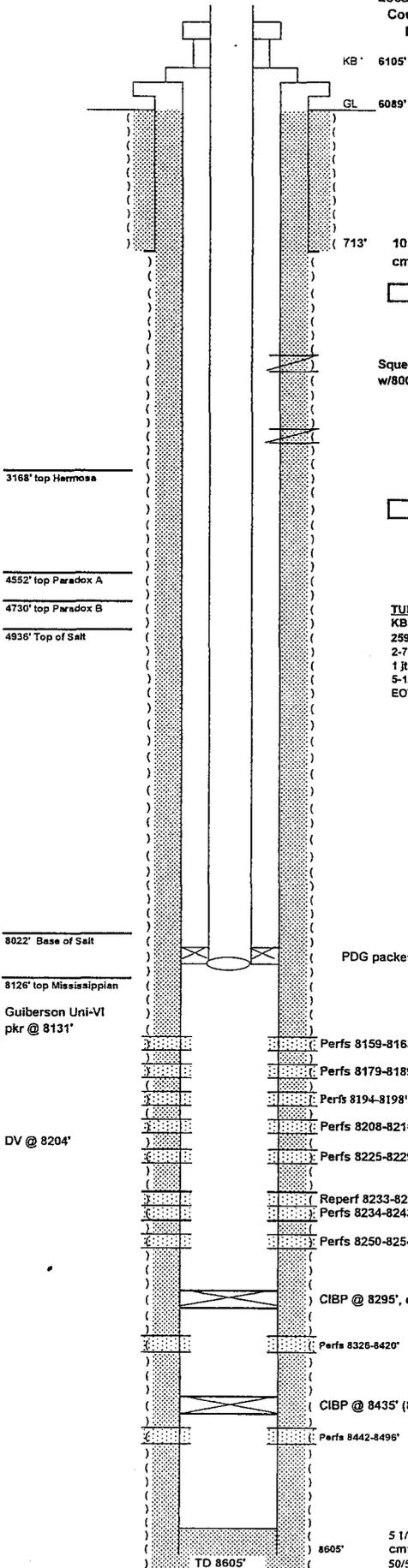
### Service Company Contacts:

Compl. Rig	Doug Reed	Monument Well Service	970-243-5408
Perforating	Joe Poole	Schlumberger, Denver	303-572-1301 office
Stimulation	Pat Kundert	Halliburton, Denver	303-260-5027 office
Stimulation	Terry Crabb	BJ, Farmington	505-327-6222 office
Logging	Joe Poole	Schlumberger, Denver	303-843-9090 office
Packers	Bryan Fairchild	STA	970-260-4564 cell
H <sub>2</sub> S Safety	Richard Moss	Rocky Mountain Safety	970-564-9387
Wellhead	Dave Anderson	Cameron	303-861-1850
Roustabouts	Jerry Ayers	BWR Roustabout	970-565-0143
Tanks	Rocky	R&W Water	970-565-4882
Anchors	Dale Milligan	Western Auger	970-241-0798
DH Tools	Corky Powell	Graco BOP-Fishing Tools	435-789-6804

Company: Tom Brown, Inc.  
 Lease Name: Lisbon Unit A-715  
 Location: Sec 15-T30S-R24E 2620' FNL & 125' FWL  
 County: San Juan County, Utah  
 Date: 3/28/2003

**CURRENT**

Spud date 06/08/65  
 Date of first sales 8/19/65  
 Workover date 02/16/01



KB' 8105'

GL 6089'

( 713'

10 3/4" 40.5# J-55 csg @ 713'  
 cmt w/482 sxs 50/50 Pozmix

**CEMENT CIRCULATED TO SURFACE**

Squeezed casing leaks @ 976' & 1328'  
 w/800+ sxs cmt (8/91)

**TOC for prod csg @ 4594' (calc.)**

**TUBING DETAIL (3/21/2001)**

KB	16.00'
259 jts 2-7/8" EUE 8rd tbg	8064.28'
2-7/8" "R" nipple	1.10'
1 jt 2-7/8" EUE 8rd tbg	31.45'
5-1/2" x 2-7/8" RDG pkr	6.00'
EOT	8118.83'

PDG packer set @ 8112.83' - tbg landed @ 8118.83'

Perfs 8159-8163'

Perfs 8179-8189'

Perfs 8194-8198'

Perfs 8208-8216'

Perfs 8225-8229'

Reperf 8233-8243'

Perfs 8234-8243'

Perfs 8250-8254'

CIBP @ 8295', cmt w/ 10' (10/97)

Perfs 8326-8420'

CIBP @ 8435' (8/91)

Perfs 8442-8496'

8605'

TD 8605'

Perf 8159' thru 8243' 2 4" hollow ported gun, 4spf,  
 23 grms (2/21/01)

Acidize w/5000 gals SWIC - 2700 psi, 123 balls 13 no  
 ball action, ISIP 700, 0 in 1min (2/22/01)

Perf w/2 spf (8/91)

Perf w/2 spf (8/91)

Perf w/2 spf (8/91)

Perf w/2 spf

**Casing Detail**  
 18-50' KB 20# N-80  
 50-2204' 17# J-55  
 2204-7708' 15.5# J-55  
 7708-8605' 17# J-55

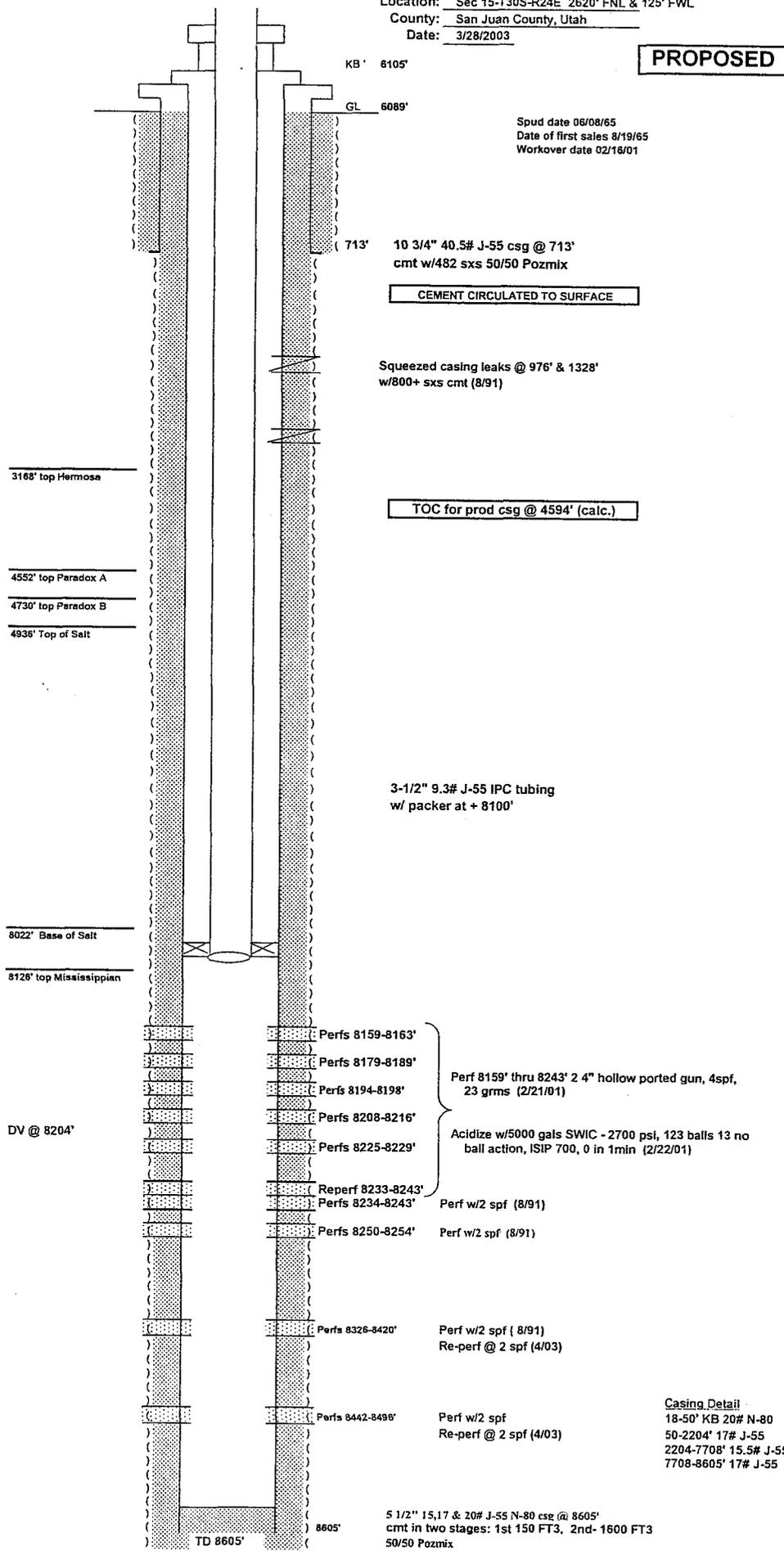
5 1/2" 15.17 & 20# J-55 N-80 csg @ 8605'  
 cmt in two stages: 1st 150 FT3, 2nd- 1600 FT3  
 50/50 Pozmix

WELLBORE DIAGRAM

Company: Tom Brown, Inc.  
 Lease Name: Lisbon Unit A-715  
 Location: Sec 15-T30S-R24E 2620' FNL & 125' FWL  
 County: San Juan County, Utah  
 Date: 3/28/2003

**PROPOSED**

Spud date 06/08/65  
 Date of first sales 8/19/65  
 Workover date 02/18/01

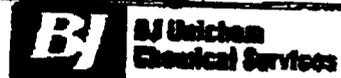


**Casing Detail**  
 18-50' KB 20# N-80  
 50-2204' 17# J-55  
 2204-7708' 15.5# J-55  
 7708-8605' 17# J-55

**ATTACHMENT NO. 6**

**WATER ANALYSIS**

Analytical Laboratory Report for:  
Tom Brown



UNICHEM Representative: Clyde Willis

## Production Water Analysis

Listed below please find water analysis report from: Lisbon Unit, B-624

*Water injected  
into SWD B-624*

Lab Test No: 2002125772      Sample Date: 07/03/2002  
Specific Gravity: 1.051  
TDS: 76671  
pH: 6.29

Cations:	mg/L	as:
Calcium	5740	(Ca <sup>++</sup> )
Magnesium	682	(Mg <sup>++</sup> )
Sodium	22964	(Na <sup>+</sup> )
Iron	4.80	(Fe <sup>++</sup> )
Barium	16.20	(Ba <sup>++</sup> )
Strontium	257.00	(Sr <sup>++</sup> )
Manganese	5.20	(Mn <sup>++</sup> )
Anions:	mg/L	as:
Bicarbonate	1452	(HCO <sub>3</sub> <sup>-</sup> )
Sulfate	1050	(SO <sub>4</sub> <sup>-</sup> )
Chloride	44500	(Cl <sup>-</sup> )
Gases:		
Carbon Dioxide	229	(CO <sub>2</sub> )
Hydrogen Sulfide	97	(H <sub>2</sub> S)

Tom Brown

Lab Test No: 2002125772



**DownHole SAT™ Scale Prediction**  
**@ 90 deg. F**

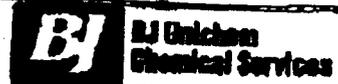
Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbis)
Calcite (CaCO <sub>3</sub> )	6.27	.122
Aragonite (CaCO <sub>3</sub> )	5.35	.118
Witherite (BaCO <sub>3</sub> )	.00434	-19.23
Strontianite (SrCO <sub>3</sub> )	.484	-.228
Magnesite (MgCO <sub>3</sub> )	.806	-.0294
Anhydrite (CaSO <sub>4</sub> )	1.01	.972
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	1.28	65.58
Baite (BaSO <sub>4</sub> )	47.25	9.38
Celestite (SrSO <sub>4</sub> )	.59	-68.76
Silica (SiO <sub>2</sub> )	0	-44.74
Brucite (Mg(OH) <sub>2</sub> )	< 0.001	-.494
Magnesium silicate	0	-114.13
Iron hydroxide (Fe(OH) <sub>3</sub> )	< 0.001	< 0.001
Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	0	> 0.001
Siderite (FeCO <sub>3</sub> )	7.31	.144
Halite (NaCl)	.0139	-168331
Therardite (Na <sub>2</sub> SO <sub>4</sub> )	< 0.001	-75391
Iron sulfide (FeS)	13.4	2.57

**Interpretation of DHSat Results:**

The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The scale is logarithmic, i.e. a Saturation Index of 3 is 10 times more saturated than a value of 2.

The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) infinity to positive (precipitating) infinity. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

Analytical Laboratory Report for:  
Tom Brown



UNICHEM Representative: Clyde Willis

## Production Water Analysis

Listed below please find water analysis report from: Lisbon Unit, B-912

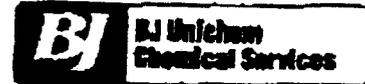
*water produced  
from Mississippian  
Reservoir*

Lab Test No: 2002125773      Sample Date: 07/03/2002  
 Specific Gravity: 1.072  
 TDS: 110032  
 pH: 6.13

Cations:	mg/L	as:
Calcium	4165	(Ca <sup>++</sup> )
Magnesium	871	(Mg <sup>++</sup> )
Sodium	37473	(Na <sup>+</sup> )
Iron	3.10	(Fe <sup>++</sup> )
Barium	0.70	(Ba <sup>++</sup> )
Strontium	117.00	(Sr <sup>++</sup> )
Manganese	0.39	(Mn <sup>++</sup> )
Anions:	mg/L	as:
Bicarbonate	952	(HCO <sub>3</sub> <sup>-</sup> )
Sulfate	1650	(SO <sub>4</sub> <sup>-2</sup> )
Chloride	64800	(Cl <sup>-</sup> )
Gases:		
Carbon Dioxide	185	(CO <sub>2</sub> )
Hydrogen Sulfide	202	(H <sub>2</sub> S)

Tom Brown

Lab Test No: 2002125773



**DownHole SAT™ Scale Prediction**  
**@ 90 deg. F**

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO3)	2.06	.0319
Aragonite (CaCO3)	1.76	.0267
Witherite (BaCO3)	< 0.001	-24.81
Strontianite (SrCO3)	.0802	-1.03
Magnesite (MgCO3)	.487	-.0551
Anhydrite (CaSO4)	1.16	44.45
Gypsum (CaSO4*2H2O)	1.41	138.88
Bartite (BaSO4)	2.52	.256
Celestite (SrSO4)	.345	-113.37
Silica (SiO2)	0	-42.21
Brucite (Mg(OH)2)	< 0.001	-.411
Magnesium silicate	0	-111.8
Iron hydroxide (Fe(OH)3)	< 0.001	< 0.001
Strengite (FePO4*2H2O)	0	>-0.001
Siderite (FeCO3)	1.75	.0302
Halite (NaCl)	.0349	-149771
Thenardite (Na2SO4)	< 0.001	-79346
Iron sulfide (FeS)	8.03	1.64

**Interpretation of DHSat Results:**

The Saturation Index is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The scale is logarithmic, i.e. a Saturation Index of 3 is 10 times more saturated than a value of 2.

The Momentary excess is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) infinity to positive (precipitating) infinity. The Momentary Excess represents the amount of scale possible while the Saturation Level represents the probability that scale will form.

DownHole SAT(tm)  
MIXED WATER DEPOSITION POTENTIAL INDICATORS

1) TB B-624 (50%)

2) TB B-912 (50%)

Report Date: 07-08-2002

SATURATION LEVEL		MOMENTARY EXCESS (Lbs/1000 Barrels)	
Calcite (CaCO <sub>3</sub> )	3.73	Calcite (CaCO <sub>3</sub> )	0.0630
Aragonite (CaCO <sub>3</sub> )	3.18	Aragonite (CaCO <sub>3</sub> )	0.0590
Witherite (BaCO <sub>3</sub> )	0.00135	Witherite (BaCO <sub>3</sub> )	-20.97
Strontianite (SrCO <sub>3</sub> )	0.210	Strontianite (SrCO <sub>3</sub> )	-0.477
Magnesite (MgCO <sub>3</sub> )	0.654	Magnesite (MgCO <sub>3</sub> )	-0.0384
Anhydrite (CaSO <sub>4</sub> )	1.22	Anhydrite (CaSO <sub>4</sub> )	45.56
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	1.50	Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	119.13
Barite (BaSO <sub>4</sub> )	29.88	Barite (BaSO <sub>4</sub> )	4.83
Celestite (SrSO <sub>4</sub> )	0.520	Celestite (SrSO <sub>4</sub> )	-78.84
Silica (SiO <sub>2</sub> )	0.00	Silica (SiO <sub>2</sub> )	-40.47
Brucite (Mg(OH) <sub>2</sub> )	< 0.001	Brucite (Mg(OH) <sub>2</sub> )	-0.407
Magnesium silicate	0.00	Magnesium silicate	-105.89
Iron hydroxide (Fe(OH) <sub>3</sub> )	< 0.001	Iron hydroxide (Fe(OH) <sub>3</sub> )	< 0.001
Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	0.00	Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	> -0.001
Siderite (FeCO <sub>3</sub> )	3.63	Siderite (FeCO <sub>3</sub> )	0.0715
Halite (NaCl)	0.0263	Halite (NaCl)	-146838
Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	< 0.001	Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	-73629
Iron sulfide (FeS)	9.47	Iron sulfide (FeS)	2.10

## SIMPLE INDICES

Langelier	0.981
Ryznar	4.18
Puckorius	0.931
Larson-Skold Index	84.26
Stiff Davis Index	0.346
Oddo-Tomson	-0.0394

## OPERATING CONDITIONS

Temperature (°F)	90.00
Time (secs)	1.00

UNICHEM - Midland Analytical Laboratory  
P.O. Box 61427, Midland, Texas 79711

DownHole SAT (tm)  
MIXED WATER DEPOSITION POTENTIAL INDICATORS

1) TB B-624 (75%)

2) TB B-912 (25%)

Report Date: 07-08-2002

SATURATION LEVEL		MOMENTARY EXCESS (Lbs/1000 Barrels)	
Calcite (CaCO3)	4.86	Calcite (CaCO3)	0.0849
Aragonite (CaCO3)	4.14	Aragonite (CaCO3)	0.0811
Witherite (BaCO3)	0.00252	Witherite (BaCO3)	-19.70
Strontianite (SrCO3)	0.319	Strontianite (SrCO3)	-0.335
Magnesite (MgCO3)	0.732	Magnesite (MgCO3)	-0.0329
Anhydrite (CaSO4)	1.15	Anhydrite (CaSO4)	30.42
Gypsum (CaSO4*2H2O)	1.44	Gypsum (CaSO4*2H2O)	97.69
Barite (BaSO4)	40.70	Barite (BaSO4)	7.12
Celestite (SrSO4)	0.577	Celestite (SrSO4)	-69.07
Silica (SiO2)	0.00	Silica (SiO2)	-41.35
Brucite (Mg(OH)2)	< 0.001	Brucite (Mg(OH)2)	-0.431
Magnesium silicate	0.00	Magnesium silicate	-107.11
Iron hydroxide (Fe(OH)3)	< 0.001	Iron hydroxide (Fe(OH)3)	< 0.001
Strengite (FePO4*2H2O)	0.00	Strengite (FePO4*2H2O)	>-0.001
Siderite (FeCO3)	5.14	Siderite (FeCO3)	0.0988
Halite (NaCl)	0.0204	Halite (NaCl)	-152565
Thenardite (Na2SO4)	< 0.001	Thenardite (Na2SO4)	-72991
Iron sulfide (FeS)	10.76	Iron sulfide (FeS)	2.33

## SIMPLE INDICES

Langelier	1.09
Ryznar	4.01
Puckorius	0.743
Larson-Skold Index	68.40
Stiff Davis Index	0.450
Oddo-Tomson	0.0959

## OPERATING CONDITIONS

Temperature (°F)	90.00
Time (secs)	1.00

UNICHEM - Midland Analytical Laboratory  
P.O. Box 61427, Midland, Texas 79711

DownHole SAT (tm)  
MIXED WATER DEPOSITION POTENTIAL INDICATORS

1) TB B-624 (25%)

2) TB B-912 (75%)

Report Date: 07-08-2002

SATURATION LEVEL		MOMENTARY EXCESS (Lbs/1000 Barrels)	
Calcite (CaCO <sub>3</sub> )	2.74	Calcite (CaCO <sub>3</sub> )	0.0424
Aragonite (CaCO <sub>3</sub> )	2.34	Aragonite (CaCO <sub>3</sub> )	0.0382
Witherite (BaCO <sub>3</sub> )	< 0.001	Witherite (BaCO <sub>3</sub> )	-22.23
Strontianite (SrCO <sub>3</sub> )	0.128	Strontianite (SrCO <sub>3</sub> )	-0.664
Magnesite (MgCO <sub>3</sub> )	0.562	Magnesite (MgCO <sub>3</sub> )	-0.0438
Anhydrite (CaSO <sub>4</sub> )	1.26	Anhydrite (CaSO <sub>4</sub> )	58.69
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	1.54	Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	138.60
Barite (BaSO <sub>4</sub> )	17.15	Barite (BaSO <sub>4</sub> )	2.55
Celestite (SrSO <sub>4</sub> )	0.448	Celestite (SrSO <sub>4</sub> )	-90.86
Silica (SiO <sub>2</sub> )	0.00	Silica (SiO <sub>2</sub> )	-39.59
Brucite (Mg(OH) <sub>2</sub> )	< 0.001	Brucite (Mg(OH) <sub>2</sub> )	-0.384
Magnesium silicate	0.00	Magnesium silicate	-104.56
Iron hydroxide (Fe(OH) <sub>3</sub> )	< 0.001	Iron hydroxide (Fe(OH) <sub>3</sub> )	< 0.001
Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	0.00	Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	>-0.001
Siderite (FeCO <sub>3</sub> )	2.45	Siderite (FeCO <sub>3</sub> )	0.0451
Halite (NaCl)	0.0332	Halite (NaCl)	-140979
Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	< 0.001	Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	-74160
Iron sulfide (FeS)	7.68	Iron sulfide (FeS)	1.87

## SIMPLE INDICES

Langelier	0.856
Ryznar	4.37
Puckorius	1.14
Larson-Skold Index	104.33
Stiff Davis Index	0.236
Odde-Tomson	-0.188

## OPERATING CONDITIONS

Temperature (°F)	90.00
Time (secs)	1.00

UNICHEM - Midland Analytical Laboratory  
P.O. Box 61427, Midland, Texas 79711

DownHole SAT(tm)  
MIXED WATER DEPOSITION POTENTIAL INDICATORS

1) TB B-624 (25%)

2) TB B-912 (75%)

Report Date: 07-08-2002

SATURATION LEVEL		MOMENTARY EXCESS (Lbs/1000 Barrels)	
Calcite (CaCO <sub>3</sub> )	3.58	Calcite (CaCO <sub>3</sub> )	0.0430
Aragonite (CaCO <sub>3</sub> )	2.90	Aragonite (CaCO <sub>3</sub> )	0.0390
Witherite (BaCO <sub>3</sub> )	< 0.001	Witherite (BaCO <sub>3</sub> )	-23.15
Strontianite (SrCO <sub>3</sub> )	0.0472	Strontianite (SrCO <sub>3</sub> )	-1.74
Magnesite (MgCO <sub>3</sub> )	1.30	Magnesite (MgCO <sub>3</sub> )	0.0114
Anhydrite (CaSO <sub>4</sub> )	1.77	Anhydrite (CaSO <sub>4</sub> )	106.48
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	0.847	Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	-10.19
Barite (BaSO <sub>4</sub> )	2.48	Barite (BaSO <sub>4</sub> )	1.61
Celestite (SrSO <sub>4</sub> )	0.343	Celestite (SrSO <sub>4</sub> )	-125.36
Silica (SiO <sub>2</sub> )	0.00	Silica (SiO <sub>2</sub> )	-110.84
Brucite (Mg(OH) <sub>2</sub> )	< 0.001	Brucite (Mg(OH) <sub>2</sub> )	-0.518
Magnesium silicate	0.00	Magnesium silicate	-165.09
Iron hydroxide (Fe(OH) <sub>3</sub> )	< 0.001	Iron hydroxide (Fe(OH) <sub>3</sub> )	< 0.001
Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	0.00	Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	>-0.001
Siderite (FeCO <sub>3</sub> )	5.51	Siderite (FeCO <sub>3</sub> )	0.0562
Halite (NaCl)	0.0241	Halite (NaCl)	-171107
Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	< 0.001	Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	-78151
Iron sulfide (FeS)	10.07	Iron sulfide (FeS)	1.88

## SIMPLE INDICES

Langelier	1.35
Ryznar	3.38
Puckorius	0.145
Larson-Skold Index	103.85
Stiff Davis Index	1.79
Odde-Tomson	0.726

## OPERATING CONDITIONS

Temperature (°F)	180.00
Time (secs)	1.00

UNICHEM - Midland Analytical Laboratory  
P.O. Box 61427, Midland, Texas 79711

DownHole SAT(tm)  
MIXED WATER DEPOSITION POTENTIAL INDICATORS

1) TB B-624 (754)

2) TB B-912 (254)

Report Date: 07-08-2002

SATURATION LEVEL		MOMENTARY EXCESS (Lbs/1000 Barrels)	
Calcite (CaCO3)	6.36	Calcite (CaCO3)	0.0808
Aragonite (CaCO3)	5.14	Aragonite (CaCO3)	0.0772
Witherite (BaCO3)	0.00211	Witherite (BaCO3)	-20.49
Strontianite (SrCO3)	0.119	Strontianite (SrCO3)	-1.04
Magnesite (MgCO3)	1.69	Magnesite (MgCO3)	0.0328
Anhydrite (CaSO4)	1.66	Anhydrite (CaSO4)	80.03
Gypsum (CaSO4*2H2O)	0.813	Gypsum (CaSO4*2H2O)	-24.30
Barite (BaSO4)	6.07	Barite (BaSO4)	6.07
Celestite (SrSO4)	0.456	Celestite (SrSO4)	-99.57
Silica (SiO2)	0.00	Silica (SiO2)	-115.78
Brucite (Mg(OH)2)	< 0.001	Brucite (Mg(OH)2)	-0.582
Magnesium silicate	0.00	Magnesium silicate	-168.85
Iron hydroxide (Fe(OH)3)	< 0.001	Iron hydroxide (Fe(OH)3)	< 0.001
Strengite (FePO4*2H2O)	0.00	Strengite (FePO4*2H2O)	> 0.001
Siderite (FeCO3)	11.63	Siderite (FeCO3)	0.101
Halite (NaCl)	0.0149	Halite (NaCl)	-183416
Thenardite (Na2SO4)	< 0.001	Thenardite (Na2SO4)	-76729
Iron sulfide (FeS)	13.48	Iron sulfide (FeS)	2.34

## SIMPLE INDICES

Langelier	1.59
Ryznar	3.01
Puckorius	-0.257
Larson-Skold Index	68.08
Stiff Davis Index	1.99
Odde-Tomson	1.01

## OPERATING CONDITIONS

Temperature (°F)	180.00
Time (secs)	1.00

UNICHEM - Midland Analytical Laboratory  
P.O. Box 61427, Midland, Texas 79711

DownHole SAT (tm)  
MIXED WATER DEPOSITION POTENTIAL INDICATORS

1) TB B-624 (50%)

2) TB B-912 (50%)

Report Date: 07-08-2002

SATURATION LEVEL		MOMENTARY EXCESS (Lbs/1000 Barrels)	
Calcite (CaCO3)	4.87	Calcite (CaCO3)	0.0614
Aragonite (CaCO3)	3.94	Aragonite (CaCO3)	0.0576
Witherite (BaCO3)	0.00112	Witherite (BaCO3)	-21.83
Strontianite (SrCO3)	0.0778	Strontianite (SrCO3)	-1.33
Magnesite (MgCO3)	1.51	Magnesite (MgCO3)	0.0219
Anhydrite (CaSO4)	1.73	Anhydrite (CaSO4)	94.27
Gypsum (CaSO4*2H2O)	0.837	Gypsum (CaSO4*2H2O)	-15.89
Barite (BaSO4)	4.38	Barite (BaSO4)	3.85
Celestite (SrSO4)	0.405	Celestite (SrSO4)	-111.49
Silica (SiO2)	0.00	Silica (SiO2)	-113.30
Brucite (Mg(OH)2)	< 0.001	Brucite (Mg(OH)2)	-0.549
Magnesium silicate	0.00	Magnesium silicate	-167.07
Iron hydroxide (Fe(OH)3)	< 0.001	Iron hydroxide (Fe(OH)3)	< 0.001
Strengite (FePO4*2H2O)	0.00	Strengite (FePO4*2H2O)	>-0.001
Siderite (FeCO3)	8.20	Siderite (FeCO3)	0.0781
Halite (NaCl)	0.0192	Halite (NaCl)	-177352
Thenardite (Na2SO4)	< 0.001	Thenardite (Na2SO4)	-77497
Iron sulfide (FeS)	12.10	Iron sulfide (FeS)	2.11

## SIMPLE INDICES

Langelier	1.48
Ryznar	3.18
Puckorius	-0.0670
Larson-Skold Index	83.86
Stiff Davis Index	1.89
Odco-Tomson	0.875

## OPERATING CONDITIONS

Temperature (°F)	180.00
Time (secs)	1.00

UNICHEM - Midland Analytical Laboratory  
P.O. Box 61427, Midland, Texas 79711

**ATTACHMENT NO. 7**  
**LIST OF PRODUCING WELLS**

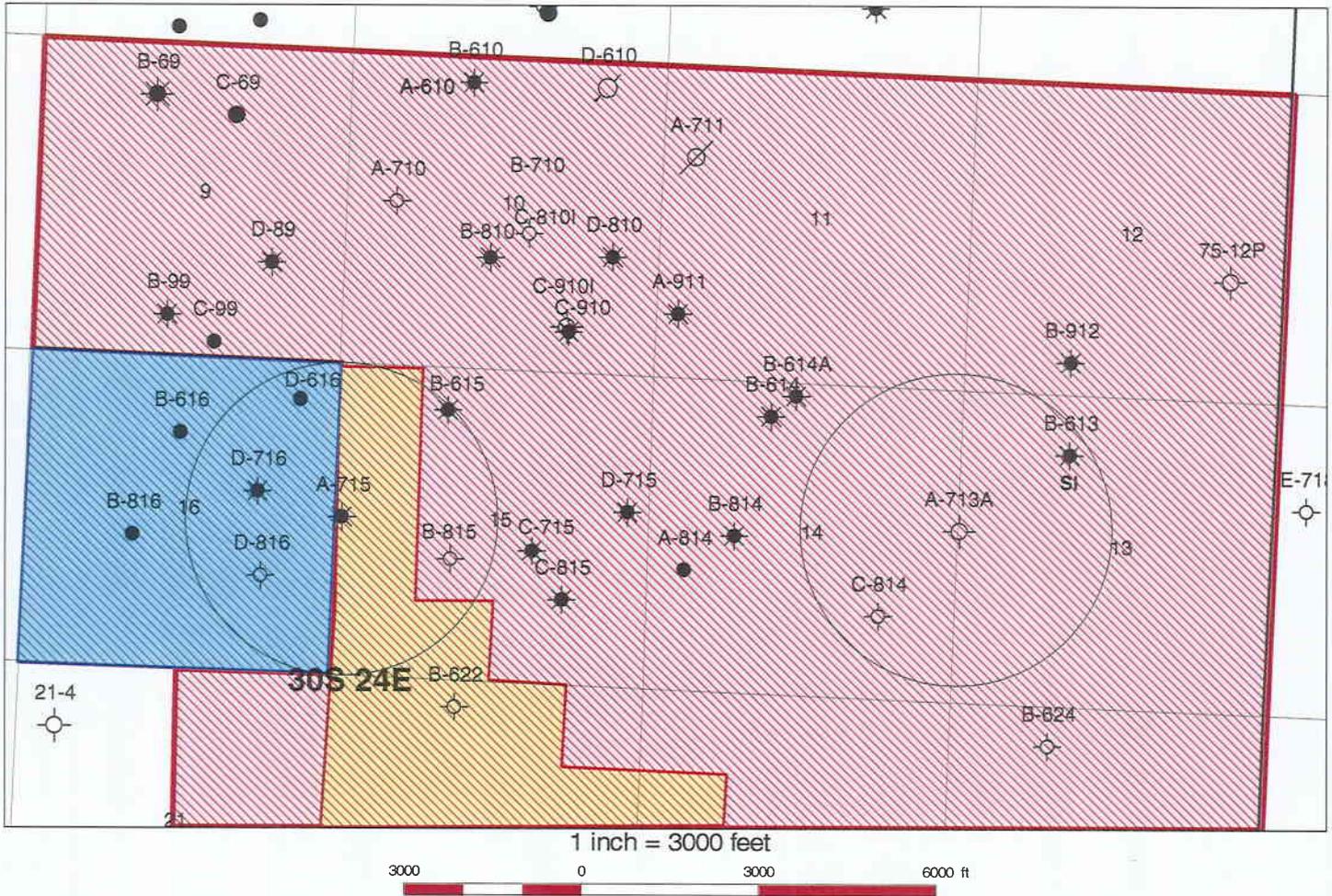
Well Name	Field	APC	RESOURCES		
Lisbon B 610 (MC)	Lisbon McCracken	043-037-16469		NE	NW
Lisbon D 610 (MC)	Lisbon McCracken	043-037-30694		NE	NE
Lisbon Fed B 614 A (MC) (P&A)	Lisbon McCracken	043-037-31351			
Egnar Unit 01	Lisbon SE	005-113-05012		SE	NE
Horse Range 01	Lisbon SE	005-113-06016		SE	NW
Horse Range 19-24	Lisbon SE	005-113-06105	590 FEL, 1690 FNL	SE	NE
Lisbon A 713A	Lisbon Unit	043-037-16236			
Lisbon A 715	Lisbon Unit	043-037-16237	125 FWL, 2620 FNL	SE	SW
Lisbon A 814 (P&A)	Lisbon Unit	043-037-16238		NW	SW
Lisbon B 084	Lisbon Unit	043-037-30054	1648 FSL, 2516 FWL	NE	SW
Lisbon B 094	Lisbon Unit	043-037-30695		SE	SW
Lisbon B 610 (MS)	Lisbon Unit	043-037-16469		NE	NW
Lisbon B 613	Lisbon Unit	043-037-16240		NE	NW
Lisbon B 614	Lisbon Unit	043-037-16468		NE	NW
Lisbon B 615	Lisbon Unit	043-037-15123	1840 FEL, 765 FNL	NE	NW
Lisbon B 616	Lisbon Unit	043-037-16242		NE	NW
Lisbon B 810	Lisbon Unit	043-037-31433		NE	SW
Lisbon B 814	Lisbon Unit	043-037-30082		NE	SW
Lisbon B 815	Lisbon Unit	043-037-16243		NE	SW
Lisbon B 912	Lisbon Unit	043-037-15769	1825 FWL, 505 FSL	SE	SW
Lisbon C 069	Lisbon Unit	043-037-16245	1935 FWL, 1288 FNL	NW	NE
Lisbon C 094	Lisbon Unit	043-037-16247		SW	SE
Lisbon C 715	Lisbon Unit	043-037-31074		NE	SW
Lisbon C 910	Lisbon Unit	043-037-31323		SW	SE
Lisbon D 084	Lisbon Unit	043-037-16250		NE	SE
Lisbon D 616	Lisbon Unit	043-037-15049	660 FEL, 660 FNL	NE	NE
Lisbon D 716	Lisbon Unit	043-037-31034	1325 FEL, 2240 FNL	SW	NE
Lisbon D 810	Lisbon Unit	043-037-16471		NE	SE
Lisbon D 89	Lisbon Unit	043-037-16251		NE	SE
Lisbon Fed 02-21 F	Lisbon Unit	043-037-15768		SE	NW
Lisbon Fed A 911	Lisbon Unit	043-037-31014		SW	SW
Lisbon Fed B 614 A (MS)	Lisbon Unit	043-037-31351		NE	NW
Lisbon Fed C 099	Lisbon Unit	043-037-30693	236 FSL, 2154 FEL	SE	SW
McIntyre Canyon 17-21	Lisbon SE	005-113-06080	1176 FWL, 2410 FNL	SW	NW
McIntyre Canyon Unit 01	Lisbon SE	005-113-05017		NE	NW
McIntyre Canyon Unit 06-H-18	Lisbon SE	005-113-06011		SE	NE
McIntyre Canyon Unit 08-34	Lisbon SE	005-113-06106	502 FEL, 970 FNL	NE	NE
Lisbon B 610 R (INJ)	Lisbon Unit				
Lisbon B 614 R (INJ)	Lisbon Unit	043-037-16468		NE	NW
Lisbon B 624 (SWD)	Lisbon Unit	043-037-16516		NE	NW
Lisbon B 810 (MS)	Lisbon Unit	043-037-31433		NE	SW
Lisbon B 816 (SWD)	Lisbon Unit	043-037-16244		NE	SW
Lisbon C 910 I (P&A)	Lisbon Unit	043-037-31805		SW	SE
Lisbon D 610 R (MC-Inj)	Lisbon Unit				
Lisbon D 810 R (INJ)	Lisbon Unit				

Section	Township	Barge	County	State	Start Date	End Date	Officer
10	30S	24E	San Juan, Ut	PR		03/11/1961	McCracken
10	30S	24E	San Juan, Ut	PR		10/03/1982	McCracken
14	30S	24E	San Juan, Ut	PA			McCracken
30	44N	19W	San Miguel, Co	SI	09/07/1960	11/26/1960	Mississippian
20	44N	19W	San Miguel, Co	WO	01/18/1975	06/17/1975	Mississippian
19	44N	19W	San Miguel, Co	APD			Mississippian
13	30S	24E	San Juan, Ut	SI		05/14/1964	Mississippian
15	30S	24E	San Juan, Ut	PR	06/08/1965	08/19/1965	Mississippian
14	30S	24E	San Juan, Ut	PA			Mississippian
4	30S	24E	San Juan, Ut	SI	05/08/1971	07/01/1971	Mississippian
4	30S	24E	San Juan, Ut	SI		05/06/1982	Mississippian
10	30S	24E	San Juan, Ut	PR			Mississippian
13	30S	24E	San Juan, Ut	SI		06/06/1961	Mississippian
14	30S	24E	San Juan, Ut	PR			Mississippian
15	30S	24E	San Juan, Ut	PR	09/06/1960	03/07/1961	Mississippian
16	30N	24E	San Juan, Ut	TA		02/06/1963	Mississippian
10	30S	24E	San Juan, Ut	NCA		10/01/1988	Mississippian
14	30S	24E	San Juan, Ut	SI		09/23/1972	Mississippian
15	30S	24E	San Juan, Ut	PA			Mississippian
12	30S	24E	San Juan, Ut	PR	07/09/1960	10/24/1960	Mississippian
9	30S	24E	San Juan, Ut	SI	05/19/1962	07/13/1962	Mississippian
4	30S	24E	San Juan, Ut	WO		01/31/1963	Mississippian
15	30S	24E	San Juan, Ut	PA			Mississippian
10	30S	24E	San Juan, Ut	PR		09/08/1987	Mississippian
4	30S	24E	San Juan, Ut	PR		04/11/1965	Mississippian
16	30S	24E	San Juan, Ut	PR	04/10/1960	10/11/1960	Mississippian
16	30S	24E	San Juan, Ut	PR	08/23/1984	10/24/1984	Mississippian
10	30S	24E	San Juan, Ut	PR			Mississippian
9	30S	24E	San Juan, Ut	PR			Mississippian
21	30S	25E	San Juan, Ut	SI			Mississippian
11	30S	24E	San Juan, Ut	PR		10/18/1984	Mississippian
14	30S	24E	San Juan, Ut	PR			Mississippian
9	30S	24E	San Juan, Ut	PR	10/11/1981	04/07/1982	Mississippian
17	44N	19W	San Miguel, Co	PR	03/16/2001	06/18/2001	Mississippian
5	44N	19W	San Miguel, Co	TA		06/19/1960	Mississippian
18	44N	19W	San Miguel, Co	TA		08/03/1971	Mississippian
8	44N	19W	San Miguel, Co	APD			Mississippian
			San Juan, Ut	SI			
14	30S	24E	San Juan, Ut	SI		05/31/1960	
24	30S	24E	San Juan, Ut	AI		07/20/1960	
10	30S	24E	San Juan, Ut	PR			
16	30S	24E	San Juan, Ut	AI		12/07/1962	
10	30S	24E	San Juan, Ut	PA	06/11/2000		
			San Juan, Ut	SI			
			San Juan, Ut	SI			

ATTACHMENT NO. 8

OWNERSHIP MAP & LIST OF OWNERS

Plot  
for R649-5-2-2.1



**Surface Ownership**

-  Federal
-  State of Utah
-  Tom Brown, Inc.

**Mineral Ownership**

-  Federal
-  State of Utah

**Legend - Well symbols**

-  Oil Producing
-  Oil & Gas Producing
-  P & A
- SI** Shut-in

 <b>Tom Brown, Inc.</b>		
<b>Paradox Basin</b> San Juan Co. Utah <b>Lisbon Field</b>		
Author: L. Josefchuk	Scale:	Date: 9 April, 2003
C.I.:		

Surface Owners

Bureau Of Land Management  
82 East Dogwood  
Moab, UT 84532

SITLA  
Lavonne Garrison  
675 East, 500 South, Suite 500  
Salt Lake City, Utah 84102

Tom Brown Inc.  
555 17<sup>th</sup> Street, Suite 1850  
Denver, CO 80202

Mineral Owners

Bureau Of Land Management  
82 East Dogwood  
Moab, UT 84532 SITLA.

SITLA  
Lavonne Garrison  
675 East, 500 South, Suite 500  
Salt Lake City, Utah 84102

Chester Gordon Trust  
600 17<sup>th</sup> St. Suite 1800  
Denver , CO 80202  
Attn: Wayne Gardenswartz

Tom Brown Inc.  
555 17<sup>th</sup> Street, Suite 1850  
Denver, CO 80202

**ATTACHMENT NO. 9**

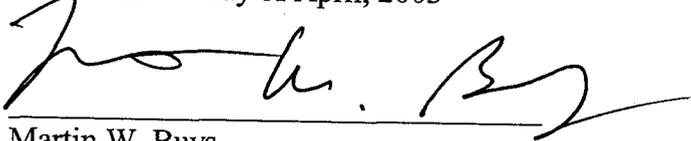
**AFFIDAVIT OF NOTIFICATION**

## AFFIDAVIT OF MAILING

I, Martin W. Buys, President, Buys & Associates, Inc. being first duly sworn, dispose and state as follows:

On April 14, 2003, I caused to be mailed by certified mail, postage prepaid, return receipt requested, a copy of the application to modify the Lisbon A-715 well to dispose of produced water. This application was sent to all operators, owners and surface owners within a one half-mile radius of the subject well.

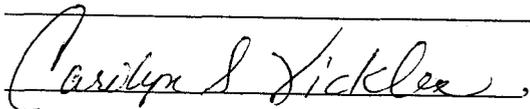
Dated this 14<sup>th</sup> day of April, 2003



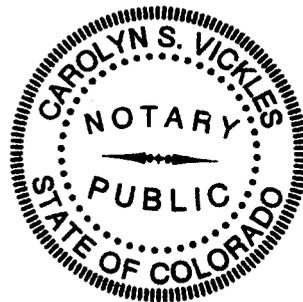
Martin W. Buys  
President  
Buys & Associates, Inc.

The forgoing affidavit was subscribed and sworn to me by Martin W. Buys.

This 14 day of April, 2003

 Notary Public

My Commission expires: 30 day of October 2006



CK

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

---

IN THE MATTER OF THE	:	
APPLICATION OF TOM BROWN, INC.	:	NOTICE OF AGENCY ACTION
FOR ADMINISTRATIVE APPROVAL OF	:	
THE LISBON UNIT A-715 WELL	:	CAUSE NO. UIC 307
LOCATED IN SEC. 15, T30S, R24E, SAN	:	
JUAN COUNTY, UTAH, AS A CLASS II	:	
INJECTION WELL	:	

---

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

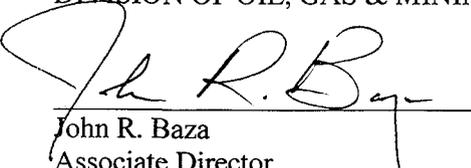
Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Tom Brown, Inc. for administrative approval of the Lisbon Unit A-715 well, located in SW NW Section 15, Township 30 South, Range 24 East, San Juan County, Utah, for conversion to a Class II injection well. This well is located in the Lisbon Unit. The adjudicative proceeding will be conducted informally according to Utah Admin.Rule R649-10, Administrative Procedures.

Selective zones in the Mississippian Formation will be used for water injection. The maximum requested injection pressure and rate will be determined based on fracture gradient information submitted by Tom Brown, Inc.

Any person desiring to object to the proposed application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for this proceeding is John R. Baza, Associate Director at PO Box 145801, Salt Lake City, Utah 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedure rule. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 24th day of April, 2003.

STATE OF UTAH  
DIVISION OF OIL, GAS & MINING



John R. Baza  
Associate Director

**Tom Brown, Inc.  
Lisbon Unit A-715  
Cause No. UIC 307**

Publication Notices were sent to the following:

Tom Brown, Inc.  
555 17th St, Suite 1850  
Denver, CO 80202

via E-Mail and Facsimile (435) 587-2277  
San Juan Record  
PO Box 879  
Monticello, UT 84535-0879

via E-Mail and Facsimile (801) 237-2776  
Salt Lake Tribune  
PO Box 45838  
Salt Lake City, UT 84145

Moab District Office  
Bureau of Land Management  
82 East Dogwood  
Moab, UT 84532

San Juan County Planning  
PO Box 9  
Monticello, UT 84535

School & Institutional Trust Lands  
675 East 500 South, Suite 500  
Salt Lake City, UT 84102-2818

Dan Jackson  
US EPA Region VIII, Suite 5000  
999 18th Street  
Denver, CO 80202-2466

  
\_\_\_\_\_  
Earlene Russell  
Executive Secretary  
April 25, 2003

TRANSACTION REPORT

P. 01

APR-28-2003 MON 01:04 PM

FOR: OIL, GAS & MINING

801 359 3940

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
APR-28	01:03 PM	2372776	49"	2	SEND	OK	855	
TOTAL :						49S PAGES:	2	



**State of Utah**  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210  
 PO Box 145801  
 Salt Lake City, Utah 84114-5801  
 (801) 538-5340 telephone  
 (801) 359-3940 fax  
 (801) 538-7223 TTY  
 www.nr.utah.gov

Michael O. Leavitt  
 Governor  
 Robert L. Morgan  
 Executive Director  
 Lowell P. Braxton  
 Division Director

April 25, 2003

SENT VIA E-MAIL AND FAX (801) 237-2776

Salt Lake Tribune  
 PO Box 45838  
 Salt Lake City, UT 84145

RE: Notice of Agency Action - Cause No. UIC 307

Gentlemen:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please send proof of publication and billing to the Division of Oil, Gas and Mining, Suite 1210, PO Box 145801, Salt Lake City, Utah 84114-5801.

Sincerely,



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor  
Robert L. Morgan  
Executive Director  
Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
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Salt Lake City, Utah 84114-5801  
(801) 538-5340 telephone  
(801) 359-3940 fax  
(801) 538-7223 TTY  
www.nr.utah.gov

April 25, 2003

SENT VIA E-MAIL AND FAX (801) 237-2776

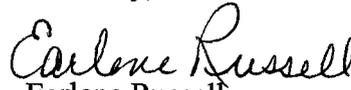
Salt Lake Tribune  
PO Box 45838  
Salt Lake City, UT 84145

RE: Notice of Agency Action - Cause No. UIC 307

Gentlemen:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please send proof of publication and billing to the Division of Oil, Gas and Mining, Suite 1210, PO Box 145801, Salt Lake City, Utah 84114-5801.

Sincerely,

  
Earlene Russell  
Executive Secretary

encl.

TRANSACTION REPORT

P. 01

APR-28-2003 MON 01:07 PM

FOR: OIL, GAS & MINING

801 359 3940

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
APR-28	01:05 PM	14355872277	1'05"	2	SEND	OK	854	
TOTAL :						1M 5S	PAGES:	2



**State of Utah**  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210  
 PO Box 145801  
 Salt Lake City, Utah 84114-5801  
 (801) 538-5340 telephone  
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 (801) 538-7223 TTY  
 www.nr.utah.gov

Michael O. Leavitt  
 Governor  
 Robert L. Morgan  
 Executive Director  
 Lowell P. Braxton  
 Division Director

April 25, 2003

SENT VIA E-MAIL AND FAX (435) 587-2277

San Juan Record  
 PO Box 879  
 Monticello, UT 84535-0879

RE: Notice of Agency Action - Cause No. UIC 307

Gentlemen:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please send proof of publication and billing to the Division of Oil, Gas and Mining, Suite 1210, PO Box 145801, Salt Lake City, Utah 84114-5801.

Sincerely,



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
(801) 538-5340 telephone  
(801) 359-3940 fax  
(801) 538-7223 TTY  
www.nr.utah.gov

Michael O. Leavitt  
Governor  
Robert L. Morgan  
Executive Director  
Lowell P. Braxton  
Division Director

April 25, 2003

SENT VIA E-MAIL AND FAX (435) 587-2277

San Juan Record  
PO Box 879  
Monticello, UT 84535-0879

RE: Notice of Agency Action - Cause No. UIC 307

Gentlemen:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please send proof of publication and billing to the Division of Oil, Gas and Mining, Suite 1210, PO Box 145801, Salt Lake City, Utah 84114-5801.

Sincerely,

  
Earlene Russell  
Executive Secretary

encl.

**From:** <sjrnews@frontiernet.net>  
**To:** "Earlene Russell" <EARLENERUSSELL@utah.gov>  
**Date:** 4/28/03 6:09PM  
**Subject:** Re: UIC 307

I can't open the attachment. Please resend with the text in the body of the e-mail message. Our next open publication date is May 7.

Thanks,  
Bill Boyle  
San Juan Record

*Resent as body of e-mail  
4/29/03*

Earlene Russell writes:

> Please advise me of the publicaton date. Thanks.  
> Earlene Russell

**From:** "NAC LEGAL" <naclegal@nacorp.com>  
**To:** "Earlene Russell" <EARLENERUSSELL@utah.gov>  
**Date:** 4/29/03 10:30AM  
**Subject:** Re: UIC 307

This ad is set to go for May 2. Please check the ad in the paper.  
Thanks.

----- Original Message -----

From: Earlene Russell  
To: naclegal@nacorp.com  
Sent: Monday, April 28, 2003 4:24 PM  
Subject: UIC 307

Please advise as to the publication date.  
Thanks.  
ER



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Moab Field Office  
82 East Dogwood Avenue  
Moab, UT 84532

3160  
Lisbon Unit  
UTU020691A  
(UT-062)

Mr. Martin W. Buys  
Tom Brown, Inc.  
555 Seventeenth Street, Suite 1850  
Denver, Colorado 80202

MAY - 5 2003

Re: Well No. A-715  
Conversion to Injection Well  
Lisbon Unit  
Lease UTU020691A  
Section 15, T30S, R24E  
San Juan County, Utah

Dear Mr. Buys:

Thank you for the sundry notice, and supporting documentation, in which you propose to convert the Lisbon A-715 well from a producing oil and gas well to a water disposal well. After reviewing your submission we have some lingering questions relative to the possibility of abandoning oil and gas reserves.

Records indicate that the Lisbon A-715 well is currently producing oil and gas at rates of about 3 bopd and 150 Mcfgpd. Although these rates are not high for a Lisbon Unit well, they do represent a significant energy source. The well has also exhibited an unusual production history with extended periods of shut-in.

We would like you to comment on reservoir dynamics, and how the conversion of this well from production to injection might affect recoverable reserves. Please address recoverable reserves on both a well specific, and field-wide basis.

Should you have any questions, please call Eric Jones at 435-259-2117.

Sincerely,  
**/s/ William Stringer**

Assistant Field Manager  
Division of Resources

cc: State of Utah, DOGM

EJones:mm:5/1/03

RECEIVED

MAY 07 2003

DIV. OF OIL, GAS & MINING

UTAH DIVISION OF WATER RIGHTS  
WATER RIGHT POINT OF DIVERSION PLOT CREATED FRI, APR 25, 200  
PLOT SHOWS LOCATION OF 0 POINTS OF DIVERSION

PLOT OF AN AREA WITH A RADIUS OF 5280 FEET FROM A  
S 2620 FEET, E 125 FEET OF THE NW CORNER,  
SECTION 15 TOWNSHIP 30S RANGE 24E SL BASE AND ME

PLOT SCALE IS APPROXIMATELY 1 INCH = 2000 FEET

N O R T H

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**Public notice**

BEFORE THE DIVISION OF OIL,  
GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH  
IN THE MATTER OF THE APPLICATION OF  
TOM BROWN, INC. FOR ADMINISTRATIVE  
APPROVAL OF THE LISBON UNIT A-715  
WELL LOCATED IN SEC. 15, T30S, R24E, SAN  
JUAN COUNTY, UTAH,  
AS A CLASS II INJECTION WELL  
NOTICE OF AGENCY ACTION  
CAUSE NO. UIC 307  
THE STATE OF UTAH TO ALL PERSONS  
INTERESTED IN THE ABOVE ENTITLED MAT-  
TER.

Notice is hereby given that the Division of Oil,  
Gas and Mining (the "Division") is commencing an  
informal adjudicative proceeding to consider the  
application of Tom Brown, Inc. for administrative  
approval of the Lisbon Unit A-715 well, located in  
SW NW Section 15, Township 30 South, Range 24  
East, San Juan County, Utah, for conversion to a  
Class II injection well. This well is located in the  
Lisbon Unit. The adjudicative proceeding will be  
conducted informally according to Utah Admin.  
Rule R649-10, Administrative Procedures.  
Selective zones in the Mississippian Formation  
will be used for water injection. The maximum  
requested injection pressure and rate will be de-  
termined based on fracture gradient information  
submitted by Tom Brown, Inc.

Any person desiring to object to the proposed  
application or otherwise intervene in the proceed-  
ing, must file a written protest or notice of inter-  
vention with the Division within fifteen days fol-  
lowing publication of this notice. The Division's  
Presiding Officer for this proceeding is John R.  
Baza, Associate Director at PO Box 145801, Salt  
Lake City, Utah 84114-5801, phone number (801)  
538-5340. If such a protest or notice of interven-  
tion is received, a hearing will be scheduled in ac-  
cordance with the aforementioned administrative  
procedure rule. Protestants and/or interveners  
should be prepared to demonstrate at the hearing  
how this matter affects their interests.  
Dated this 24th day of April, 2003.

STATE OF UTAH  
DIVISION OF OIL, GAS & MINING  
s/ John R. Baza  
Associate Director  
Published May 7, 2003 in the San Juan Record,  
Monticello.

3  
ER  
3th East  
535  
Nres  
26  
h

**AFFIDAVIT OF PUBLICATION**

I, William Webster Boyle, being duly sworn, depose and say that I am  
the publisher of **The San Juan Record**, a weekly newspaper of  
general circulation published at Monticello, Utah every Wednesday;  
that notice of agency action (Cause No. UIC 307), a copy of which is  
hereunto attached, was published in the regular and entire issue of  
each number of said newspaper for one issue, on May 7, 2003.

*Bill Boyle*

Bill Boyle, Publisher

Subscribed and sworn to before me this 7 day of May  
A.D. 2003.

*Terry Cramer*

Notary Public residing at Monticello, Utah  
My commission expires December 12, 2006

RECEIVED  
MAY 12 2003  
DIV. OF OIL, GAS & MINING

143 SOUTH MAIN ST.  
P.O. BOX 45838  
SALT LAKE CITY, UTAH 84145  
FED. TAX I.D.# 87-0217663

Newspaper Agency Corporation  
The Salt Lake Tribune  DESERET NEWS

CUSTOMER'S COPY

PROOF OF PUBLICATION

CUSTOMER NAME AND ADDRESS	ACCOUNT NUMBER	DATE
DIV OF OIL-GAS & MINING 1594 W NORTH TEMP #1210 P.O. BOX 145801 SALT LAKE CITY, UT 84114	D5385340L-07	05/02/03

ACCOUNT NAME	
DIV OF OIL-GAS & MINING	
TELEPHONE	INVOICE NUMBER
801-538-5340	TL580209JY1
SCHEDULE	
START 05/02/03 END 05/02/03	
CUST. REF. NO.	
CAPTION	
BEFORE THE DIVISION OF OIL, GA	
SIZE	
54 LINES 2.00 COLUMN	
TIMES	RATE
1	1.25
MISC. CHARGES	AD CHARGES
.00	138.00
TOTAL COST	
138.00	

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

NOTICE OF AGENCY ACTION  
CAUSE NO. UIC 307

IN THE MATTER OF THE APPLICATION OF TOM BROWN, INC. FOR ADMINISTRATIVE APPROVAL OF THE LISBON UNIT A-715 WELL LOCATED IN SEC. 15, T30S, R24E, SAN JUAN COUNTY, UTAH, AS A CLASS II INJECTION WELL

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Tom Brown, Inc. for administrative approval of the Lisbon Unit A-715 well, located in SW NW Section 15, Township 30 South, Range 24 East, San Juan County, Utah, for conversion to a Class II injection well. This well is located in the Lisbon Unit. The adjudicative proceeding will be conducted informally according to Utah Admin. Rule R649-10, Administrative Procedures.

Selective zones in the Mississippian Formation will be used for water injection. The maximum requested injection pressure and rate will be determined based on fracture gradient information submitted by Tom Brown, Inc.

Any person desiring to object to the proposed application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. The Division's Presiding Officer for this proceeding is John R. Baza, Associate Director at PO Box 145801, Salt Lake City, Utah 84114-5801, phone number (801) 538-5340. If such a protest or notice of intervention is received, a hearing will be scheduled in accordance with the aforementioned administrative procedure rule. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 24th day of April, 2003.

STATE OF UTAH  
DIVISION OF OIL, GAS & MINING

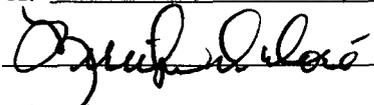
/s/ John R. Baza  
Associate Director

580209JY

AFFIDAVIT OF PUBLICATION

AS NEWSPAPER AGENCY CORPORATION LEGAL BOOKKEEPER, I CERTIFY ADVERTISEMENT OF BEFORE THE DIVISION OF OIL, GA DIV OF OIL-GAS & MINING WAS PUBLISHED BY THE CORPORATION, AGENT FOR THE SALT LAKE TRIBUNE AND DESERET NEWS PRINTED IN THE ENGLISH LANGUAGE WITH GENERAL CIRCULATION IN IN SALT LAKE CITY, SALT LAKE COUNTY IN THE STATE OF UTAH.

PUBLISHED ON START 05/02/03 END 05/02/03

SIGNATURE 

DATE 05/02/03



THIS IS NOT A STATEMENT BUT A "PROOF OF PUBLICATION"

PLEASE PAY FROM BILLING STATEMENT.

"CAUSE NO. UIC" = UIC always

RECEIVED

MAY 15 2003

DIV. OF OIL, GAS & MINING

2007 REC 6131

6503 JUD 301G

UTAH DEPARTMENT OF NATURAL RESOURCES LIBRARY

TO: CHRIS KIERST

DATE: MAY 27, 2003

FROM: MAGE YONETANI *Myt*

SUBJECT: OVERDUE NOTICE

LIBRARY POLICY: Library materials are checked-out for a 1 month period, and may be renewed twice. Each renewal period is one month. After the first notice, second and third notices are sent in 1 week intervals, no fines are incurred, but library privileges will be suspended if you fail to respond within one week of the third notice.

If you wish to renew please initial next to each item or e-mail, or telephone me (7-3333); if not, please return publications to library.

<u>DATE OUT</u>	<u>DATE DUE</u>	<u>CALL NO.</u>	<u>TITLE</u>
04/24/03	05/26/03	GEOPHYS. WELL LOGS	API 43-037-16237 (15 T30S R24E - Lisbon A715)

*Extended 2 mo.  
CK 5/27/03*

**UIC INJECTION PERMIT ANALYSIS FORM**  
**WELL NAME: Lisbon Unit A-715A**

R649-5-2. Requirements For Class II Injection Wells Including Water Disposal, Storage And Enhanced Recovery Wells.	Completed Items, Needed Items, & Comments
1. Injection wells shall be completed. Equipped, operated, and maintained in a manner that will prevent pollution and damage to any USDW, or other resources and will confine injected fluids to the interval approved.	1. OK
2. The application for an injection well shall include a properly completed UIC Form 1 and the following:	2. OK
2.1. A plat showing the location of the injection well, all abandoned or active wells within a one-half mile radius of the proposed well, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well.	2.1. OK
2.2. Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper, and porosity.	2.2. OK
2.3. A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented.	2.3. OK
2.4. Copies of logs already on file with the division should be referenced, but need not be re-filed.	2.4. OK
2.5. A description of the casing or proposed casing program of the injection well and of the proposed method for testing the casing before use of the well.	2.5. OK
2.6. A statement as to the type of fluid to be used for injection. its source and estimated amounts to be injected daily.	2.6. OK
2.7. Standard laboratory analyses of (1) the fluid to be injected, (2) the fluid in the formation into which the fluid is being injected, and (3) the compatibility of the fluids.	2.7. OK
2.8. The proposed average and maximum injection pressures.	2.8. OK, although no average injection pressure is proffered.
2.9. Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter the fresh water strata.	2.9. A step rate test will NOT be required prior to conversion of this existing production well to a injection well. Injection pressure is low and step rate test is most likely of limited utility.
2.10. Appropriate geological data on the injection interval and confining beds, and nearby Underground Sources of Drinking Water, including the geologic name, lithologic description, thickness, depth, water quality, and lateral extent; also information relative to geologic structure near the proposed well which may effect the conveyance and/or storage of the injected fluids.	2.10. OK
2.11. A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no conduit exists that could enable fluids to migrate up or down the wellbore and enter improper intervals.	2.11. OK
2.12. An affidavit certifying that a copy of the application has been provided to all operators, owners and surface owners within a one-half mile radius of the proposed injection well.	2.12. OK
2.13. Any other additional information that the board or division may determine is necessary to adequately review the application.	2.13. OK

OTHER COMMENTS AND OBSERVATIONS:

Reviewed by: Christopher J. Kierst

Date: 5/27/2003

DIVISION OF OIL, GAS AND MINING  
UNDERGROUND INJECTION CONTROL PROGRAM

*Good!  
Just a few  
comments/  
changes*

**PERMIT  
STATEMENT OF BASIS**

**Applicant:** Tom Brown, Incorporated

**Well:** Lisbon Unit A - 715

**Location:** T30S, R24E, S15, San Juan Co. Utah

**API:** 4303716237

**Ownership Issues:**

The well is located on land that is held in a split estate. The surface at the location is fee land with Federal minerals that are administered by the Bureau of Land Management within the Lisbon Federal Unit. There are two fee surface landowners, one of whom is the applicant operator, within a half mile buffer distance about the proposed injection well. Tom Brown, Incorporated retains a Federal lease on the hydrocarbon mineral estate on Section 15. A sworn Affidavit of Mailing (of the application and associated documentation to the particular owners, operators and surface owners) has been tendered.

**Well Integrity:**

Description of the Casings and Cement:

CASING PROGRAM

<u>String Type</u>	<u>Hole Size</u>	<u>Depth</u>	<u>Feet</u>	<u>Casing Diameter</u>	<u>Weight</u>	<u>Grade</u>	<u>Connection Type</u>
Conductor	-	-	-	-	-	-	-
Surface	15"	713'	25 jts.	10 3/4"	40.5#	J-55	?
Production	8 3/4"	8,605'	259 jts.	5 1/2"	20, 17, 15.5#	J-55, N-80	?

CEMENT PROGRAM

<u>String Type</u>	<u>DV Depth</u>	<u>Stage Lead/Tail</u>	<u>Cement Bottom</u>	<u>Cement Top</u>	<u>Number Sacks</u>	<u>Cement Type</u>	<u>Cement Yield</u>	<u>Cement Weight</u>
Conductor	-	-	-	-	-	-	-	-
Surface	-	350 ft <sup>3</sup> 107 ft <sup>3</sup>	713'	surface	482	50/50 POZ 50/50 POZ	-	?
Production	8,204'	2 <sup>nd</sup> Stg.	8,605'	4,537calc 4,594CBL	1,600 ft <sup>3</sup>	50/50 POZ	-	?
"	-	1 <sup>st</sup> Stg.	-	-	150 ft <sup>3</sup>	50/50POZ	-	?

## Ground Water Protection:

Tom Brown, Inc. proposes to inject a Field produced water mixture back into the host reservoir strata of origin, the through an overall perforated interval from 8,159' to 8,496', which is the interval used in previous salt water disposal operations. This SWD proposal is designed to replace the B-624 SWD well, which was converted to a "waste gas" disposal well. Analysis of a representative sample of the composite field produced water, which was being injected into the B-624, revealed Total Dissolved Solids (TDS) to be 76,671 mg/l. As a rough gauge of the range of TDS values that may be found in the field, an analysis of produced water from another field well provided a TDS of 110,032 mg/l. It is very unlikely that a good quality ground water resource can be found in the Mississippian Leadville Limestone near the injection well location and, particularly, at that depth. The only water reported during drilling was encountered in the Pennsylvanian age Hermosa Group at a depth of 3,168 feet.

The operator asks to be permitted to inject a composite of Field produced waters into the source reservoir strata (Mississippian Leadville Limestone) at a Maximum Allowable Surface Injection Pressure of 1,500 psi. The depth proposed injection interval is from 8,159 feet to 8,496 feet. They propose a maximum injection rate of 2,000 barrels per day.

The base of moderately saline waters (encountered at about the 4500' elevation) occurs over 7000' higher, at about 1,600 feet of depth in the A-715 proposed injection well. The primary confining layer above the injection zone will be approximately 3,000' to 4,000' of Paradox Salt. In this area, the Leadville Limestone is not considered an Underground Source of Drinking Water (USDW; a water source containing less than 10,000 mg/l, total dissolved solids).

There are no subsurface water rights filed within a mile of the A-715.

Field produced water injection wells have been in operation since 1965. There are currently two injection wells and they have been injecting about 1,200 to 1,800 barrels of water per day at low surface injection pressure. The Division has considered of the lengthy history of successful injection operations at the Lisbon Valley Field, the current low surface injection pressures and the physical properties of the great thickness of the Paradox Salt confining strata. It has elected to waive the need for extensive evidence that the confining interval will not be compromised by injection operation or that it is of limited extent.

## Oil/Gas & Other Mineral Resources Protection:

The Lisbon Field Leadville Limestone productive zone has effectively been "watered out" in the injection well by the anticlinal field's active water drive. No other known potentially producible zones are recognized in this well.

A review of the well records of the Division of Oil, Gas and Mining revealed that there were five other wells within the one-half mile regulatory area of review. Two are plugged and abandoned and three are oil producers.

Uranium mining has historically occurred in the Lisbon Valley area, as recently as during the late 1970's or early 1980's. The lateral extent of the subsurface workings of these mines is not available to the Division's Geographic Information System and it is not known with certainty if that information has been archived anywhere. For this reason, no attempt has been made to determine the proximity of the nearest subsurface workings in the mines either laterally or in terms of elevation above the injection zone. Division Abandoned Mines management suggests that some information may be located at a University of Wyoming repository specifically dedicated to the archival storage of such information. From personal experience, I know that the nearby mines were working in the Chinle Formation and possibly the uppermost Cutler Formation, both of which are above the confining Paradox Salt section. The portal to the Little Beaver Mine lies about 1 mile east northeast of the A-715 well.

**Bonding:**

Tom Brown, Incorporated, has an state-wide \$80,000 surety bond filed with the State School and Institutional Trust Lands Administration which provides coverage for plugging this well.

*Is it  
on a  
pad?  
wash?*

**Actions Taken and Further Approvals Needed:**

Notice of this application was published in the Salt Lake Tribune and San Juan Record. In addition, copies of the notice was provided to the EPA Region 8, the BLM Moab District Office, the School and Institutional Trust Lands Administration and Tom Brown, Incorporated. The notice stated the proposed interval for injection to be selective zones in the Leadville Limestone (Mississippian). Any future injection into a formation other than that permitted will require administrative approval after appropriate sampling and testing.

After reviewing their documentary submission and application, it is my conclusion that Tom Brown, Incorporated, ought to be granted a permit to utilize the A-715 well for injecting Field produced water into the proposed zone. The proposed operations would not result in any meaningful diminution in the quality of the noxious formation water. No negative impacts on any superjacent high quality ground water resource are anticipated resultant of the subject permitted operations.

A properly designed and constructed injection well, combined with periodic mechanical integrity tests, demonstrably poses no threat to fresh or useable groundwater supplies. The Division staff recommends administrative approval of

this application.

Note: Applicable technical publications concerning water resources in the general vicinity of this project have been reviewed and taken into consideration during the permit review process.

Reviewer(s): Christopher J. Kierst Date: 5/27/2003

(new injection well)

INJECTION WELL - PRESSURE TEST

Well Name: A-715 API Number: 43-37-16237  
 Qtr/Qtr: \_\_\_\_\_ Section: 15 Township: 30 S Range: 24 E  
 Company Name: Tom Brown  
 Lease: State \_\_\_\_\_ Fee \_\_\_\_\_ Federal X Indian \_\_\_\_\_  
 Inspector: Mark Jones Date: June 10, 2003

Initial Conditions:

Tubing - Rate: 0 Pressure: ~~270#~~ 270# psi

Casing/Tubing Annulus - Pressure: 150 psi

100# after some bleed off prior to start of test  
0# after bleeding to truck

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
9:40am 0	<u>1000#</u>	<u>270#</u>
5	_____	_____
10	_____	_____
9:55am 15	<u>950#</u>	<u>300#</u>
20	_____	_____
25	_____	_____
30	_____	_____

Results: Pass/Fail Pass

Conditions After Test:

Tubing Pressure: \_\_\_\_\_ psi  
 Casing/Tubing Annulus Pressure: \_\_\_\_\_ psi

COMMENTS: Communication between annulus & tubing,

Operator Representative \_\_\_\_\_

June 12, 2003

Tom Brown, Inc.  
Suite 1850  
Denver, CO 80202-3918  
Attn: Brant Gimmeson

Re: Lisbon Unit A-715 Salt Water Disposal Well, Section 15, Township 30 South, Range 24 East (SLBM), San Juan County, Utah

Gentlemen:

Pursuant to Utah Admin. Code R649-5-3-3, the Division of Oil, Gas and Mining (the "Division") issues its administrative approval for conversion of the referenced well to a Class II salt water disposal well. Accordingly, the following stipulations shall apply for full compliance with this approval:

1. Compliance with all applicable requirements for the operation, maintenance and reporting for Underground Injection Control ("UIC") Class II injection wells pursuant to Utah Admin. Code R649-1 et seq.
2. Conformance with all conditions and requirements of the complete application submitted by Tom Brown, Incorporated.

If you have any questions regarding this approval or the necessary requirements, please contact Christopher Kierst at (801) 538-5337 at this office.

Sincerely,

John R. Baza  
Associate Director

er  
cc: Dan Jackson, Environmental Protection Agency  
Eric Jones, BLM Moab Office  
San Juan County Planning  
School and Institutional Trust Lands

INJECTION WELL - PRESSURE TEST

Well Name: <u>A-715</u>	API Number: <u>43-037-16237</u>
Qtr/Qtr: <u>SWNW</u> Section: <u>15</u>	Township: <u>30S</u> Range: <u>24E</u>
Company Name: <u>Torn Brown</u>	
Lease: State _____ Fee _____	Federal <input checked="" type="checkbox"/> Indian _____
Inspector: <u>Mark L Jones</u>	Date: <u>June 24, 2003</u>

Initial Conditions:

Tubing - Rate: 0 Pressure: 0 psi

Casing/Tubing Annulus - Pressure: 0 psi

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
8:35 am 0	<u>1000 #</u>	<u>0 #</u>
5	_____	_____
10	_____	_____
8:50 am 15	<u>1000 #</u>	<u>0 #</u>
20	_____	_____
25	_____	_____
30	_____	_____

Results: Pass/Fail

Conditions After Test:

Tubing Pressure: 0 psi

Casing/Tubing Annulus Pressure: 0 psi

COMMENTS: 15 BBLs H<sub>2</sub>O in tubing prior to test to "kill" the well. It had 20# on tubing prior to H<sub>2</sub>O then went on vacuum and stayed on vac.

Operator Representative \_\_\_\_\_



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
(801) 538-5340 telephone  
(801) 359-3940 fax  
(801) 538-7223 TTY  
www.nr.utah.gov

Michael O. Leavitt  
Governor  
Robert L. Morgan  
Executive Director  
Lowell P. Braxton  
Division Director

July 22, 2003

Brant Gimmeson  
Tom Brown, Inc.  
Suite 1850  
Denver, CO 80202-3918

Re: Lisbon Unit A-715 Salt Water Disposal Well, Section 15, Township 30 South, Range 24 East (SLBM), San Juan County, Utah

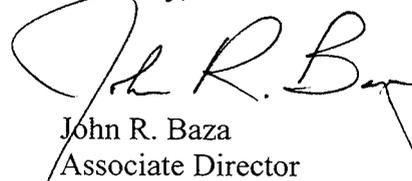
Gentlemen:

Pursuant to Utah Admin. Code R649-5-3-3, the Division of Oil, Gas and Mining (the "Division") issues its administrative approval for conversion of the referenced well to a Class II salt water disposal well. Accordingly, the following stipulations shall apply for full compliance with this approval:

1. Compliance with all applicable requirements for the operation, maintenance and reporting for Underground Injection Control ("UIC") Class II injection wells pursuant to Utah Admin. Code R649-1 et seq.
2. Conformance with all conditions and requirements of the complete application submitted by Tom Brown, Incorporated.

If you have any questions regarding this approval or the necessary requirements, please contact Christopher Kierst at (801) 538-5337 at this office.

Sincerely,



John R. Baza  
Associate Director

CK/ts

cc: Dan Jackson, Environmental Protection Agency  
Eric Jones, BLM Moab Office  
San Juan County Planning  
School and Institutional Trust Lands



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

(801) 538-5340 telephone

(801) 359-3940 fax

(801) 538-7223 TTY

www.nr.utah.gov

Michael O. Leavitt  
Governor

Robert L. Morgan  
Executive Director

Lowell P. Braxton  
Division Director

UNDERGROUND INJECTION CONTROL PERMIT

Cause No. UIC-307

**Operator:** Tom Brown, Incorporated  
**Wells:** Lisbon Unit A-715  
**Location:** Section 15, Township 30 South, Range 24 East (SLBM), San Juan County  
**API No.:** 43-037-16237  
**Well Type:** Salt Water Disposal Well

**Stipulations of Permit Approval**

1. Approval for conversion to Injection Well issued on July 22, 2003.
2. Maximum Allowable Injection Pressure: 1500 psig
3. Maximum Allowable Injection Rate: No specific rate necessary.
4. Injection Interval: Selective zones in the Leadville Limestone.

Approved by:

  
John R. Baza  
Associate Director

7/22/2003  
Date

CK/ts

cc: Dan Jackson, Environmental Protection Agency  
Bureau of Land Management, Moab District Office  
San Juan County Planning  
School and Institutional Trust Lands

DIVISION OF OIL, GAS AND MINING  
UNDERGROUND INJECTION CONTROL PROGRAM

**PERMIT  
STATEMENT OF BASIS**

**Applicant:** Tom Brown, Incorporated

**Well:** Lisbon Unit A - 715

**Location:** T30S, R24E, S15, San Juan Co. Utah

**API:** 4303716237

**Ownership Issues:**

The well is located on land that is held in a split estate. The surface at the location is fee land with Federal minerals that are administered by the Bureau of Land Management within the Lisbon Federal Unit. There are two fee surface landowners, one of whom is the applicant operator, within a half mile buffer distance about the proposed injection well. Tom Brown, Incorporated retains a Federal lease on the hydrocarbon mineral estate on Section 15. A sworn Affidavit of Mailing (of the application and associated documentation to the particular owners, operators and surface owners) has been tendered.

**Well Integrity:**

Description of the Casings and Cement:

CASING PROGRAM

<u>String Type</u>	<u>Hole Size</u>	<u>Depth</u>	<u>Feet</u>	<u>Casing Diameter</u>	<u>Weight</u>	<u>Grade</u>	<u>Connection Type</u>
Conductor	-	-	-	-	-	-	-
Surface	15"	713'	25 jts.	10 3/4"	40.5#	J-55	?
Production	8 3/4"	8,605'	259 jts.	5 1/2"	20, 17, 15.5#	J-55, N-80	?

CEMENT PROGRAM

<u>String Type</u>	<u>DV Depth</u>	<u>Stage Lead/Tail</u>	<u>Cement Bottom</u>	<u>Cement Top</u>	<u>Number Sacks</u>	<u>Cement Type</u>	<u>Cement Yield</u>	<u>Cement Weight</u>
Conductor	-	-	-	-	-	-	-	-
Surface	-	350 ft <sup>3</sup> 107 ft <sup>3</sup>	713'	surface	482	50/50 POZ 50/50 POZ	-	?
Production	8,204'	2 <sup>nd</sup> Stg.	8,605'	4,537calc 4,594CBL	1,600 ft <sup>3</sup>	50/50 POZ	-	?
"	-	1 <sup>st</sup> Stg.	-	-	150 ft <sup>3</sup>	50/50POZ	-	?

## **Ground Water Protection:**

Tom Brown, Inc. proposes to inject a Field produced water mixture back into the host reservoir strata of origin through an overall perforated interval from 8,159' to 8,496', which is the interval used in previous salt water disposal operations. This SWD proposal is designed to replace the B-624 SWD well, which was converted to a "waste gas" disposal well. Analysis of a representative sample of the composite field produced water, which was being injected into the B-624, revealed Total Dissolved Solids (TDS) to be 76,671 mg/l. As a rough gauge of the range of TDS values that may be found in the field, an analysis of produced water from another field well provided a TDS of 110,032 mg/l. It is very unlikely that a good quality ground water resource can be found in the Mississippian Leadville Limestone near the injection well location and, particularly, at that depth. The only water reported during drilling was encountered in the Pennsylvanian age Hermosa Group at a depth of 3,168 feet.

The operator asks to be permitted to inject at a Maximum Allowable Surface Injection Pressure of 1,500 psi. They propose a maximum injection rate of 2,000 barrels per day.

The base of moderately saline waters (encountered at about the 4500' elevation) occurs over 7000' higher, at about 1,600 feet of depth in the A-715 proposed injection well. The primary confining layer above the injection zone will be approximately 3,000' to 4,000' of Paradox Salt. In this area, the Leadville Limestone is not considered an Underground Source of Drinking Water (USDW; a water source containing less than 10,000 mg/l, total dissolved solids).

There are no subsurface water rights filed within a mile of the A-715.

Field produced water injection wells have been in operation since 1965. There are currently two injection wells and they have been injecting about 1,200 to 1,800 barrels of water per day at low surface injection pressure. The Division has considered the lengthy history of successful injection operations at the Lisbon Valley Field, the current low surface injection pressures and the physical properties of the great thickness of the Paradox Salt confining strata. It has elected to waive the need for extensive evidence that the confining interval will not be compromised by the injection operation or that it is of limited extent. The operator references the reservoir studies and additional information prepared for permitting the nearby B-624 "waste gas" disposal well. That well is permitted to inject into the same interval at a surface pressure that is 460 psi higher than that sought for this well, although the injection interval is also 777 feet lower. The injection pressure in the B-624 well was permitted based on the analysis of results obtained from a downhole injection pressure survey, a pressure falloff test and a step rate test.

## **Oil/Gas & Other Mineral Resources Protection:**

The Lisbon Field Leadville Limestone productive zone has effectively been “watered out” in the injection well by the anticlinal field’s active water drive. No other known potentially producible zones are recognized in this well.

A review of the well records of the Division of Oil, Gas and Mining revealed that there were five other wells within the one-half mile regulatory area of review. Two are plugged and abandoned and three are oil producers.

Uranium mining has historically occurred in the Lisbon Valley area, as recently as during the late 1970’s or early 1980’s. The lateral extent of the subsurface workings of these mines is not available to the Division’s Geographic Information System and it is not known with certainty if that information has been archived anywhere. For this reason, no attempt has been made to determine the proximity of the nearest subsurface workings in the mines either laterally or in terms of elevation above the injection zone. Division Abandoned Mines management suggests that some information may be located at a University of Wyoming repository specifically dedicated to the archival storage of such information. From personal experience, I know that the nearby mines were working in the Chinle Formation and possibly the uppermost Cutler Formation, both of which are above the confining Paradox Salt section. The portal to the Little Beaver Mine lies about 1 mile east northeast of the A-715 well.

**Bonding:**

Tom Brown, Incorporated, has posted a statewide surety bond for \$150,000 with the Bureau of Land Management for plugging their wells. Information regarding the other details of the bond should be obtained from that agency.

**Actions Taken and Further Approvals Needed:**

Notice of this application was published in the Salt Lake Tribune and San Juan Record. In addition, copies of the notice was provided to the EPA Region 8, the BLM Moab District Office, the School and Institutional Trust Lands Administration and Tom Brown, Incorporated. The notice stated the proposed interval for injection to be selective zones in the Leadville Limestone (Mississippian). Any future injection into a formation other than that permitted will require administrative approval after appropriate sampling and testing.

After reviewing their documentary submission and application, it is my conclusion that Tom Brown, Incorporated, ought to be granted a permit to utilize the A-715 well for injecting Field produced water into the proposed zone. The proposed operations would not result in any meaningful diminution in the quality of the noxious formation water. No negative impacts on any superjacent high quality ground water resource are anticipated resultant of the subject permitted operations.

A properly designed and constructed injection well, combined with periodic mechanical integrity tests, demonstrably poses no threat to fresh or useable groundwater supplies. The Division staff recommends administrative approval of this application.

Note: Applicable technical publications concerning water resources in the general vicinity of this project have been reviewed and taken into consideration during the permit review process.

Reviewer(s): Christopher J. Kierst Date: 5/27/2003

UNDERGROUND INJECTION CONTROL PERMIT

Cause No. UIC-307

**Operator:** Tom Brown, Incorporated  
**Wells:** Lisbon Unit A-715  
**Location:** Section 15, Township 30 South, Range 24 East  
(SLBM), San Juan County, Utah  
**API No.:** 43-037-16237  
**Well Type:** Salt Water Disposal Well

Stipulations of Permit Approval

1. Approval for conversion to Injection Well issued on June 12, 2003.
2. Maximum Allowable Surface Injection Pressure: 1,500 psi.
3. Maximum Allowable Injection Rate: 2,000 barrels per day.

*Foot?* 4. Injection Interval: Selective zones in the Leadville Limestone.

---

---

Approved by:

~~(Foot)~~ John R. Baza  
Associate Director

Date

A-715 - CHRIS  
43037 16237  
S15, T30S, R24E  
DID NOT FIND  
LOOKING FOR INFO  
DOC

UTAH DEPARTMENT OF NATURAL RESOURCES LIBRARY

TO: CHRIS KIERST

DATE: JUL 28, 2003

FROM: MAGE YONETANI *myt*

SUBJECT: EXTENDED CHECK-OUT

The following have been checked-out to you for a 3 months. If you would like to extend it/them for another 3 months, please initial next to the item and return this notice to me, or you may telephone (7-3333), or e-mail your renewal request. If not please return publication(s) to the library. Thank you.

<u>DATE OUT</u>	<u>DATE DUE</u>	<u>CALL NO.</u>	<u>TITLE</u>
04/24/03	07/26/03	GEOPHYS. WELL LOGS	API 43-037-16237 (15 T30S R24E)

UTAH DEPARTMENT OF NATURAL RESOURCES LIBRARY

TO: CHRIS KIERST

DATE: AUG 04, 2003

FIRST NOTICE DATE: JUL 28, 2003

FROM: MAGE YONETANI *mzt*

SUBJECT: EXTENDED CHECK-OUT

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<u>DATE OUT</u>	<u>DATE DUE</u>	<u>CALL NO.</u>	<u>TITLE</u>
04/24/03	07/26/03	GEOPHYS. WELL LOGS	API 43-037-16237 (15 T30S R24E)

*Got 3 mo. extension  
8/5/03*



TOM BROWN, INC.

September 17, 2003

Mr. Eric Jones  
Bureau of Land Management  
Moab Field Office  
82 East Dogwood Avenue  
Moab, UT 84532

RE: Lisbon Unit Well No. A-715  
Conversion to Injection Well  
Lease UTU020691A  
Section 15, T30S, R24E  
San Juan County, Utah

43-037-16231

Dear Mr. Jones:

Tom Brown, Inc. is in the process of permitting the Lisbon Unit A-715 as a water disposal well, and is in receipt of a letter from the Bureau of Land Management dated May 5, 2003 which outlines concerns such as reservoir dynamics and the impact on recoverable reserves. TBI continues to recommend the Lisbon A-715 be converted to a SWD well based on a wellbore selection process, the current water disposal system configuration, and minimal impact on rate and reserves.

***Water Disposal Well Justification***

Water disposal in the Lisbon Field began in November, 1965 when the Lisbon Unit B-624 (originally plugged and abandoned in 1960) was re-entered and recompleted as a SWD well. The disposal project proved to be successful, and, by the end of 2002, the Lisbon B-624 well had received roughly 42 million barrels of water over its 37-year injection history. Years later, the Lisbon Unit B-816 was added as a second SWD well to accommodate increasing water production rates. The Lisbon Unit B-624 was converted to acid gas injection in 2002, leaving the B-816 as the only SWD well. The Lisbon A-715 is recommended as a replacement for the B-624.

***Disposal Well Selection / Well History***

The Lisbon Unit A-715 wellbore was chosen as the best SWD candidate based on several criteria that take into account safety, wellbore condition, well location, geologic position, etc. The selection process included a thorough review of all Lisbon Field wellbores, and the A-715 offered the following advantages:

RECEIVED

SEP 22 2003

DIV. OF OIL, GAS & MINING

- The Lisbon Unit A-715 has the proper wellbore configuration and excellent mechanical integrity as evidenced by testing during recent workovers as well as successfully passing the most recent MIT test,
- The A-715 well is sufficiently located in the reservoir in a down-structure position such that produced water can be injected into the watered-out portion of the Mississippian (Leadville) formation (similarly to the B-816 and B-624), minimizing the impact on producers in this portion of the field,
- The surface location of the A-715 well is relatively close to the Lisbon Plant, minimizing the length of pipeline and right-of-way required to install an injection line to the well and the associated surface disturbance,
- With the BLM's support of the A-715 well, Lisbon's water disposal project (including the Plant and the Lisbon B-816 SWD well) would be focused in the southwest portion of the field; whereas the acid gas injection project (utilizing the B-624 and A-713A wellbores) would be concentrated in the southeast portion of the field effectively isolating the two disposal projects and improving operational efficiencies within each, and
- Converting the A-715 to a SWD well minimizes the impact on overall rate and reserves since the A-715 well and offsetting wells produce at relatively low rates compared to the up-structure gas-cap blowdown wells.

The Lisbon Unit A-715 was initially drilled in 1965 and completed in the lower dolomite section of the Leadville with perforations from 8442' to 8496'. In 1991, the well was plugged back to 8435' and recompleted to the intervals 8234'-8243', 8250'-8254', and 8326'-8420'. The well was subsequently put on gas lift. Due to relatively low oil and gas rates, high water production rates, and low structural position, the A-715 was shut-in during 1993 at the time Unocal expanded the Lisbon Plant and began blowdown of the gas cap. During 1997, an attempt was made to isolate water production by setting a CIBP at 8295', leaving only the upper two sets of perforations, but the well remained shut-in until 2001 when Tom Brown, Inc. recompleted the well to the limestone section in the upper portion of the Leadville formation. The well has produced sporadically via plunger lift ever since at fairly low rates (most recently in April, 2003 at 4 BOPD and 120 MCFPD) with an increasing water cut (103 BWPD in April, 2003), and is often shut-in during the winter months due to flow line freezing. There are no additional pay intervals in the Leadville to test in the Lisbon Unit A-715.

#### ***Rate and Reserves Impact***

Converting the Lisbon Unit A-715 well to SWD will have minimal impact on producing rates and reserves for the following reasons:

- Based on individual well economics, the A-715 is a marginal producer with a short economic life; rate and reserves deferral is minimal,
- The A-715 is valuable to the Lisbon Field as a SWD well to help maintain the overall field producing rate of roughly 45,000 MCFD, and
- The reserves assigned to the A-715 would ultimately be recovered by offsetting wells completed in the same interval.

Tom Brown's 1/1/2003 Reserves Report lists Lisbon (Mississippian) Unit reserves as a single entry since field reserves are determined from an aggregate material balance (P/Z) plot. However, by breaking out the Lisbon Unit A-715 as a single well case and running economics based on the same scenarios as TBI's Reserves Report, the

remaining economic gross reserves for the A-715 are 0.8 MBO, 45.0 MMCF, and 3.1 MB of NGLs over a two year life. These results are based on an exponential decline of 31.5% per year, operating costs of \$3,000 per month, shrink of 44%, and oil and gas prices of \$24.77/BO and \$3.14/MCF, respectively. The gross remaining reserves for the Lisbon Field is 45.3 BCF. Gas reserves for the A-715 (0.045 BCF) are therefore only 0.1% of the Lisbon Field reserves, indicating that the deferred production of the reserves allocated to the A-715 are minor.

The Lisbon Unit A-715 well becomes more valuable to the field as a SWD well than a marginal producer. The Lisbon Field produces as much gas (45 MMCFD) in one day as the total gross remaining gas reserves in the A-715 (45 MMCF). Since the Lisbon B-624 has already been converted to acid gas injection, the Lisbon Field is dependent on one SWD well, the Lisbon B-816. If the B-816 experienced any type of operational upset, Lisbon production would have to be curtailed until the problem was remedied, and one day of cumulative downtime in the next two years would economically justify the A-715 as a SWD well.

Finally, Tom Brown, Inc. would not be promoting waste of the remaining reserves from the Lisbon Unit A-715 by converting the well to SWD. These reserves would simply be deferred since they would ultimately be recovered from offsetting wells D-616, D-716, and C-99, which were also re-completed to the upper limestone portion of the Leadville formation in 2001. When the Lisbon Unit A-715 well was prepared for water injection, down-hole plugs were drilled out so that the produced water could be injected into the more porous and permeable dolomite section of the Leadville similar to the current SWD well, the Lisbon Unit B-816. The dolomitic portion of the Leadville (the original oil leg) is watered out at the Lisbon A-715 location. Overall, the rate, reserves, and economic impact of converting the Lisbon Unit A-715 to a SWD well is negligible relative to the importance of a second SWD well considering that the reserves from the A-715 would ultimately be recovered by offsetting wells.

Tom Brown, Inc. appreciates your support of this project. If you have any questions or need additional information, please contact me at (303) 260-5036.

Sincerely,

TOM BROWN, INC.



Byron R. Gale, P.E.  
Corporate Engineer  
Utah License 277688-2202

cc: Brant Gimmeson (Tom Brown, Inc., Denver)  
Marty W. Buys (Buys & Associates, Inc., Englewood)  
State of Utah, DOGM

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

5. Lease Designation and Serial No.  
USA U-020691-A

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

6. If Indian, Allotte or Tribe Name

7. Unit Agreement Name

Lisbon Unit

8. Well Name and Number

Lisbon A-715

9. API Well Number

43-037-16237

10. Field and Pool, or Exploratory Area

Lisbon-Mississippian

1. Type of Well

Oil Well     Gas Well     Other

2. Name of Operator:

Tom Brown, Inc.

Contact:

Brant Gimmeson

Phone:

303-260-5000

3. Address and Telephone No.

555 Seventeenth Street, Suite 1850, Denver, CO 80202

4. Location of Well

Footages: 2620'FNL, 125' FWL  
QQ, Sec T,R,M: SWNW Sec. 15-T30S-R24E

County: San Juan

State: Utah

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

**NOTICE OF INTENT**  
(Submit in Duplicate)

- Abandon
- Repair Casing
- Change Plans
- Convert to Injection
- Fracture Treat or Acidize
- Multiple Completion
- Other
- New Construction
- Pull or Alter Casing
- Recomplete
- Reperforate
- Vent or Flare
- Water Shut-Off

Approximate date work will start \_\_\_\_\_

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

- Abandon\*
- Repair Casing
- Change Plans
- Convert to Injection
- Fracture Treat or Acidize
- Other
- New Construction
- Pull or Alter Casing
- Recomplete
- Reperforate
- Vent or Flare
- Water Shut-Off

Put on injection 11/21/03

Date of work completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.

\* Must be accompanied by a cement verification report.

12. 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.)

This well has been converted from the A-715 to an UIC well.

13. Name (Printed/Typed) Gabriele Forrest	Title Regulatory Analyst
Signature <i>Gabriele Forrest</i>	Date 11/24/2003

(This space for State use only)

RECEIVED  
DEC 01 2003  
DIV. OF OIL, GAS & MINING

Utah

COPY

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

FORM 3160-4  
(August, 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. Type of Well: Oil Well  Gas Well  Dry  Other: SWD

1b. Type of Completion: New Well  Workover  Deepen  Plug Back  Diff. Reserv.  Other:

2. Name of Operator: Jane Washburn  
Tom Brown, Inc. 303-260-5031

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 2620' FNL & 125' FWL

At top prod. interval reported below

At total depth SAME

15. Date T.D. Reached: 7/23/65  
16. Date Completed. (prod) Ready to Prod. X  
Orig 08/19/65 Workover 3/21/01 SWD 5/25/03

18. Total Depth: 8605'  
19. Plug Back T.D.: ~~8295'~~ 8558

21. Type Electric & Other Mechanical Logs Run (Submit Copy of each)  
Gamma Ray - Sonic and Laterolog 4-03 (CBL)

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 Skis & Type of Cement	Slurry vol. (BBL)	Cement Top*	Amount Pulled
15"	10 3/4" J-55	40.5#	Surface	713'		cmt w/482 sxs	50/50 Pozmix		
8 3/4"	5 1/2" J-55 & N-80	15,17,20#	Surface	8605'		1st stage 150 FT3 2nd stage 1600 FT3	50/50 Pozmix		

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"	7619'							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf Status
A) Mississippian	8126'	TD	8442-8496' & 8326-8420'		2 spf	Below CIBP @ 8435' & 8295'
B)			8250-8254' & 8234-8243'		2 spf	open
C)			8233-8243', 8225-8229', 8208-8216', 8194-8198', 8179-8189' & 8159-8163'			
D)				23 grms	4 spf	open

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

Depth Interval	Amount and Type of Material
	SEE WELLBORE FOR DETAIL

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
8/19/1965	3/21/2001	24 hrs		24 bbls	444 mcf	110 bbls			NA
Choke Size	Tbg Press. Flwg./SI	Csg Press.	24 Hr. Rate	Oil (BBL)	Gas (MCF)	Water (BBL)	Gas:Oil Ratio	Well Status	
choke @ 100%	240 psi	0 psi		24 BOPD	444 MCFPD	110 BWPD		Converted to SWD well	

28a. Production - 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./SI	Csg Press.	24 Hr. Rate	Oil (BBL)	Gas (MCF)	Water (BBL)	Gas:Oil Ratio	Well Status	

(See instructions and spaces for additional data on reverse side)

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AUG 23 2004

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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./SI	Csg Press.	24 Hr. Rate	Oil (BBL)	Gas (MCF)	Water (BBL)	Gas:Oil Ratio	Well Status	

28c. Productin - 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./SI	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

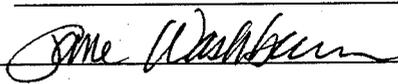
Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
Hermosa	3168'	4936'	Various porous zones - water bearing - not tested	Hermosa	3168'
Mississippian	8326'	TD	Various oil b Orig 08/19/65 Workover 3/21/01	Paradox A	4552'
				Paradox B	4730'
				Top of Salt	4936'
				Base of Salt	8022'
				Molas	8122'
				Mississippian	8126'
				Miss. Dolo. Por.	8326'

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: Daily Well History

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

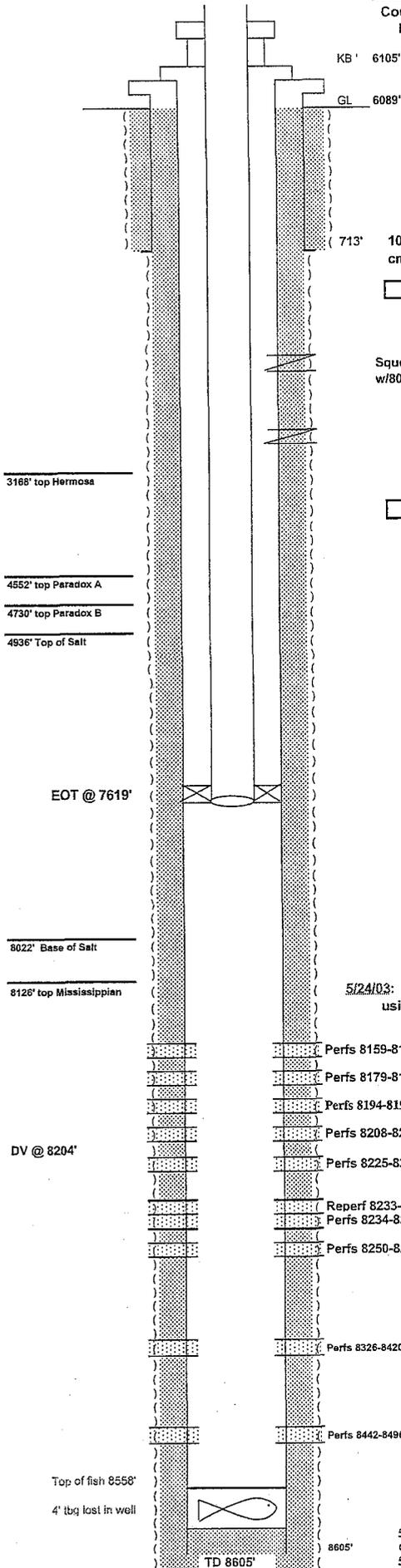
Name (please print) Jane Washburn Title Engineering Tech  
 Signature  Date 8/19/04

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 A-715  
 Location: Sec 15-T30S-R24E 2620' FNL & 125' FWL  
 County: San Juan County, Utah  
 Date: 3/28/2003  
 Revised 8/19/04 JW

Spud date 06/08/65  
 Date of first sales 8/19/65  
 Workover date 02/16/01  
 Convert to SWD well (UIC) 8/25/03



10 3/4" 40.5# J-55 csg @ 713'  
 cmt w/482 sxs 50/50 Pozmix

**CEMENT CIRCULATED TO SURFACE**

Squeezed casing leaks @ 976' & 1328'  
 w/800+ sxs cmt (8/91)

**TOC for prod csg @ 4594' (calc.)**

TUBING DETAIL (5/23/03)

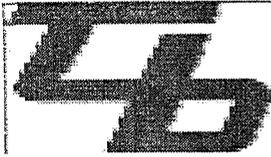
KB	14.00
Pup jt 3.5" 9.3# J-55 IPC tbg	10.10
Pup jt 3.5" 9.3# J-55 IPC tbg	2.15
IPC 3.5" EUE Brd x 3.5" 9.3# J-55 X-over	0.63
270 lts 3.5" 9.3# J-55 IPC tbg	7589.30
IPC 3.5" J-55 x 2-7/8" EUE Brd X-over	0.80
IPC 2-7/8" x 2-3/8" EUE Brd	0.85
IPC Baker 40-26 GBH seal assembly	0.72
Baker 44-26 5.5" Model D pkr	0
	7618.55

5/24/03: Acidized 8159-8496 w/15,000 gal 15% SWIC HCL  
 using 300 7/8" Bio Balls displaced w/119 bbl Clayfix H2O

- Perfs 8159-8163'
  - Perfs 8179-8189'
  - Perfs 8194-8198'
  - Perfs 8206-8216'
  - Perfs 8225-8229'
  - Reperf 8233-8243'
  - Perfs 8234-8243'
  - Perfs 8250-8254'
  - Perfs 8326-8420'
  - Perfs 8442-8496'
- Perf 8159' thru 8243' 2 4" hollow ported gun, 4spf, 23 grms (2/21/01)  
 Acidize w/5000 gals SWIC - 2700 psi, 123 balls 13 no ball action, ISIP 700, 0 in 1min (2/22/01)  
 Perf w/2 spf (8/91)  
 Perf w/2 spf (8/91)  
 Perf w/2 spf (8/91)  
 Re-perf @ 2 spf (4/03)

Casing Detail  
 18-50' KB 20# N-80  
 50-2204' 17# J-55  
 2204-7708' 15.5# J-55  
 7708-8605' 17# J-55

5 1/2" 15.17 & 20# J-55 N-80 csg @ 8605'  
 cmt in two stages: 1st 150 FT3, 2nd- 1600 FT3  
 50/50 Pozmix



**Tom Brown, Inc.**

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

**WellWork AFE Chronological  
 Regulatory Report**

<b>Well Name : Lisbon A 715 SWD</b>							
Prospect:	Lisbon				AFE #:	40221	
Sec/Twp/Rge:	15 / 30S / 24E				Operator:	Tom Brown, Inc.	
API #:	4303716237	Field:	Lisbon Unit		Supervisor:	Rex Thompson	
Work Type:	Recompletion	County, St.:	San Juan, Ut		Phone:		
Production Current/Expected	Oil:	0 / 0	Gas:	0 / 0	Water:	0 / 0	
Job Purpose : Convert well to SWD.							

<b>Wellwork Details</b>							
Date :	<b>4/4/2003</b>	Activity :	Move Rig	Rig Name :	MWS	Days :	1
Daily Report Summary :							
Daily Report Detail:		Road rig to location. Moved in and spotted all equipment. SD for night.					
Date :	<b>4/5/2003</b>	Activity :	Pull tbg	Rig Name :	MWS	Days :	2
Daily Report Summary :							
Daily Report Detail:		1100 psi on casing. 150 psi on tbg. Safety meeting. Blew well down. Killed well w/100 bbls fw. ND WH. NU BOP. POH w/tbg. Made up 4-5/8" bit. RIH w/50 stands tbg. SD for night.					
Date :	<b>4/6/2003</b>	Activity :	SD for Weekend	Rig Name :	MWS	Days :	3
Daily Report Summary :							
Daily Report Detail:		SD Saturday					
Date :	<b>4/7/2003</b>	Activity :	SD for Weekend	Rig Name :	MWS	Days :	4
Daily Report Summary :							
Daily Report Detail:		Shut down Sunday.					
Date :	<b>4/8/2003</b>	Activity :	Drill out CIBP	Rig Name :	MWS	Days :	5
Daily Report Summary :							
Daily Report Detail:		240 psi on well. Bled well off. W/O foam unit 5 hrs. RIH w/60 stands to 7800'. RU foam unit. Unloaded well w/air. Shut well in w/600 psi. SD for night.					
Date :	<b>4/9/2003</b>	Activity :	Drill out CIBP	Rig Name :	MWS	Days :	6
Daily Report Summary :							
Daily Report Detail:		Safety meeting. 640 psi casing pressure. 740 psi tbg pressure. Blew well down. RIH w/10 stands tbg. Unloaded well w/air. Established circulation w/foam. RIH and tagged @ 8222'. Rotated and circulated down to 8265'. Tagged solid. Drilled 1-1/2 hrs w/bit torquing up severely. Fell through and tagged @ 8280'. Drilled 1 hr w/bit torquing severely. Circulated hole clean. Found large pieces of rubber, ball sealers and small amount of cement in returns. SD for night.					
Date :	<b>4/10/2003</b>	Activity :	POOH w/bit	Rig Name :	MWS	Days :	7
Daily Report Summary :							
Daily Report Detail:		1100 psi on well. Safety meeting. Blew well down. Established circulation w/foam. Tagged @ 8280'. Drilled 20 min w/bit torquing severely. Not making hole. Killed well w/65 bbls fw. POH w/tbg and bit. All cones missing from bit. RIH w/notched collar. Unloaded well w/air. Established reverse circulation w/foam. Tagged @ 8280'. Set down and rotated w/notched collar. Lost circulation after 30 min. POH w/20 stands tbg. SD for night.					
Date :	<b>4/11/2003</b>	Activity :	Fishing	Rig Name :	MWS	Days :	8
Daily Report Summary :							
Daily Report Detail:		750 psi on well. Blew well down. Killed w/65 bbls fw. POH w/remaining tbg and notched collar. Nothing recovered. Made up junk basket and jars. RIH and tagged @ 8280'. Unloaded well w/air. 2-1/2 hrs to unload from bottom. Established circulation w/foam. Drilled w/junk basket w/mill torquing severely at first and smoothing out after 30 min. Began making hole. Made approx. 1' hole. Killed well w/30 bbls fw. POH w/90 stands tbg. SD for night.					

**Well Name : Lisbon A 715 SWD**

Prospect:	Lisbon			AFE #:	40221	
Sec/Twp/Rge:	15 / 30S / 24E			Operator:	Tom Brown, Inc.	
API #:	4303716237	Field:	Lisbon Unit	Supervisor:	Rex Thompson	
Work Type:	Recompletion	County, St.:	San Juan, Ut	Phone:		
Production Current/Expected	Oil:	0 / 0	Gas:	0 / 0	Water:	0 / 0
Job Purpose : Convert well to SWD.						

Date :	<b>4/12/2003</b>	Activity:	Fishing	Rig Name:	MWS	Days :	9
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Daily Report Summary :							
Daily Report Detail:							
750 psi on well. Blew well down. Killed well w/50 bbls fw. POH w/remaining tbg and tools. Recovered large pieces of rubber and 4 large pieces of bit cones. Made up flat bottom mill and jars. RIH to 7800'. Unloaded well w/air. RIH to 8280'. Unloaded well and established circulation w/foam. Drilled 13' cement w/mill torquing up for first 15 min and smoothing out and drilling normally. Started drilling on plug w/mill torquing and sticking severely. Drilled 1 hr. SD foam unit. Killed tbg w/30 bbls. POH w/40 stands. SD for night.							

Date :	<b>4/13/2003</b>	Activity:	Fishing	Rig Name:	MWS	Days :	10
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Daily Report Summary :							
Daily Report Detail:							
Safety meeting. 350 psi on well. Blew well down. Killed well w/50 bbls fw. POH w/remaining tbg and mill. Made up magnet, boot basket and jars. RIH. Tagged @ 8293'. Pumped 30 bbls wtr down tbg @ 4 bpm. Set down and turned tbg. Worked up and down and turned for 20 min. Let well stabilize for 30 min. POH w/tbg and tools. Recovered 35 small pieces of bit cones 3/4" diameter and smaller. RIH w/90 stands tbg. SD for night.							

Date :	<b>4/14/2003</b>	Activity:	rig down	Rig Name:	MWS	Days :	11
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Daily Report Summary :							
Daily Report Detail:							
350 psi on well. Blew well down. Pumped 30 bbls fw down casing. RIH w/43 stands tbg. ND BOP. NU WH. RDMO.							

Date :	<b>4/23/2003</b>	Activity:	MI Service Unit	Rig Name:	MWS	Days :	20
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Daily Report Summary :							
Daily Report Detail:							
MI Monument Well Service rig # 8 and related equip							

Date :	<b>4/24/2003</b>	Activity:	POOH w/ tubing	Rig Name:	MWS	Days :	21
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Daily Report Summary :							
Daily Report Detail:							
POOH w/tbg, RIH w/mill & tbg.							
Safety meeting. SITP 20 psi, SICP 300 psi. RU service unit. Bled pressure off well. ND tree & NU BOP. MI & RU Weatherford foam unit. Talley OOH 265 jts 2 7/8" tbg (8237.52') & SN. TIH w/4 5/8" bladed junk mill, bit sub, 1 jt tbg, SN & 266 additional jts 2 7/8" tbg, tagged @ 8302' KB. POOH to 8250'. SWI & SDFN							

Date :	<b>4/25/2003</b>	Activity:	Drill out CIBP	Rig Name:	MWS	Days :	22
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Daily Report Summary :							
Daily Report Detail:							
Drill CIBP, Circulate w/foam							
Safety meeting. SICP 20 psi, SITP 20 psi. Bled psi off well. RU drilling equip. RIH to 8302' & tag. Establish circulation w/ foam. Drill CIBP 8302' to 8304' & fell free. RIH to 8425' & tag. Drill bottom of CIBP & cmt to 8439'. Circulate well clean. POOH to 8300'. SWI & SDFN							

Date :	<b>4/26/2003</b>	Activity:	POOH w/ tubing	Rig Name:	MWS	Days :	23
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Daily Report Summary :							
Daily Report Detail:							
Drill & POOH w/part of tbg. 19.5 jts tbg & BHA in well							
Safety meeting. SITP 600 psi, SICP 600 psi. Bled psi off csg. TIH to 8439' & tag. RU drilling equip. Establish circulation w/foam. Drill 8439' to 8440' in 3.5 hrs. Very little fine metal in returns. Circulate clean, load tbg w/20 bbl FW, RD drilling equip. POOH w/251.5 jts 2 7/8" tbg. Tbg parted in middle of body, bottom rolled in & rounded smooth. 19.5 jts 2 7/8" tbg, BS & 4 5/8" mill in well (615'). Est. top of fish 7824'. SWI & SDFN.							
Note: On 4-24-03 tbg stuck for aprox. 1 hr when drilling @ 8434', worked free.							

Date :	<b>4/27/2003</b>	Activity:	SDFWE	Rig Name:	MWS	Days :	24
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Daily Report Summary :							
Daily Report Detail:							
SDFWE							
SDFWE							

Date :	<b>4/28/2003</b>	Activity:	SDFWE	Rig Name:	MWS	Days :	25
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Daily Report Summary :							
Daily Report Detail:							
SDFWE							
SDFWE							

Date :	<b>4/29/2003</b>	Activity:	Repair rig	Rig Name:	MWS	Days :	26
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Daily Report Summary :							
Daily Report Detail:							
Change out drilling line on service unit							
Change out drilling line on service unit.							

## Well Name : Lisbon A 715 SWD

Prospect:	Lisbon			AFE #:	40221	
Sec/Twp/Rge:	15 / 30S / 24E			Operator:	Tom Brown, Inc.	
API #:	4303716237	Field:	Lisbon Unit	Supervisor:	Rex Thompson	
Work Type:	Recompletion	County, St.:	San Juan, Ut	Phone:		
Production Current/Expected	Oil:	0 / 0	Gas:	0 / 0	Water:	0 / 0
Job Purpose : Convert well to SWD.						
Date :	4/30/2003	Activity:	Fishing	Rig Name:		Days :27
Daily Report Summary :		RIH w/WO shoe & BHA, tagged high @ 7636', POOH				
Daily Report Detail:		Safety meeting. SICP 460 psi. Bled pressure off csg. TIH w/4 5/8" WO shoe, extension, top sub, X-O, oil jars, 6 - 3 1/2" DC's, X-O & 228 jts 2 7/8" tbg. Tagged @ 7291', pulled free w/2 pts over. RU drilling equip, establish circulation w/foam. Drill 15 min making 6" & fell free. RIH to 7636' & tagged jarred free w/20,000# over, set down again & had to jar free again. POOH w/tbg & BHA.				
Date :	5/1/2003	Activity:	Fishing	Rig Name:		Days :28
Daily Report Summary :		Swage csg				
Daily Report Detail:		Safety meeting. SICP 240 psi. Bled pressure off csg. TIH w/4.65" swage, XO, bumper sub, oil jars, X-O, 6 - 3 1/2" DC's, intensifier, X-O & 240 jts 2 7/8" tbg. Tagged @ 7636', worked through w/1 to 3 pts. RIH & tagged @ 7647', worked through for 1 hr w/2 to 10 pts. RIH & tagged top of fish @ 7827'. POOH & hung up @ 7647' worked & jarred through area for 2 hrs.w/2 to 18 pts. POOH w/tbg & BHA. Changed out swage & bumper sub for 4.5" WO shoe w/4.60" OD & top sub. TIH w/same remaining BHA & 2 7/8" tbg. Unable to get below 7648', hanging up & had to jar free. POOH to 7602'. SWI & SDFN				
Date :	5/2/2003	Activity:	Fishing	Rig Name:		Days :29
Daily Report Summary :		Trip tbg & BHA, mill top of fish.				
Daily Report Detail:		Safety meeting. SITP 40 psi, SICP 40 psi. Bled pressure off well. POOH w/tbg & BHA. Changed out 4.5" WO shoe & top sub for 4" WO shoe w/4.5" OD, 4" top sub & XO, TIH w/same BHA & 245 jts 2 7/8" tbg. Tagged @ 7827'. Established circulation w/foam. Dress top of fish @ 7827' / 30 min, tbg plugged & pressured up. Bled pressure off tbg. POOH 25 stds tbg. SWI & SDFN.				
Date :	5/3/2003	Activity:	Fishing	Rig Name:		Days :30
Daily Report Summary :		Dress top of fish				
Daily Report Detail:		Safety meeting. SITP 300 psi, SICP 300 psi. Bled pressure off well. POOH w/tbg & BHA. Light markings on bottom of shoe & 1/2" on ID of cutrite, no markings any farther up on OD or ID of shoe, (no indication of what plugged tbg). TIH w/same BHA & 245 jts 2 7/8" tbg. Tagged @ 7827'. Established circulation w/foam. Dress 1.5' @ top of fish & slid over fish 3.5'. Circulate well clean. POOH w/tbg & BHA. SWI & SDFN.				
Date :	5/4/2003	Activity:	Fishing	Rig Name:		Days :31
Daily Report Summary :		Jarred on fish				
Daily Report Detail:		Safety meeting. SICP 360 psi. Bled pressure off well. TIH w/4 1/8" overshot, bumper sub & same remaining BHA & 245 jts 2 7/8" tbg. Tagged @ 7827', slid over to 7831' & engaged fish, jarred 40 min & jarred free. POOH, no recovery. Made up overshot w/6' of additional extension to get over 10.5' of fish. TIH w/BHA & tbg, slid over fish to 7837', jarred on fish 4 hrs, moved fish up hole 18', made 7' in last hr. (Fish slides down hole when cocking jars & hole is lost then regained.) Pulled 20,000# over. SWI & SDFN				
Date :	5/5/2003	Activity:	SDFWE	Rig Name:		Days :32
Daily Report Summary :		SDFWE				
Daily Report Detail:		SDFWE				
Date :	5/6/2003	Activity:	Fishing	Rig Name:		Days :33
Daily Report Summary :		Jarred & worked fish up hole				
Daily Report Detail:		Safety meeting. SITP 70 psi, SICP 70 psi. Bled pressure off well. Jarred & worked top of fish to 7262' in 3.5 hrs. Jarred an additional 4 hrs to get to 7209' w/top of fish, bottom @ 7825'. Jarred free. (Moved fish 625' up hole). POOH w/tbg & BHA, no recovery, spiral grappel smooth & broken. Change out overshot, add an additional 3.5' of extension to get over 14' of fish, change jars & intensifier. TIH w/BHA & 35 stds tbg. SWI & SDFN.				
Date :	5/7/2003	Activity:	Fishing	Rig Name:		Days :34
Daily Report Summary :		Recovered fish				
Daily Report Detail:		Safety meeting. SITP 40 psi, SICP 40 psi. Bled pressure off well. Finish TIH w/tbg & BHA. Engaged fish w/top @ 7209'. Jarred on fish 30 min Jarred free, attempted to RIH, Unable to get below point jarred free.) POOH w/tbg & BHA, recovered fish, 10.3' of parted jt of tbg, 19 jts tbg, bit sub & mill. (Estimate 4' of tbg lost in well). TIH w/4" WO shoe w/4.5" OD, extension, top sub, X-O, jars, 6 - 3 1/2" DCs, intensifier & tbg. Tagged @ 7818' & went past, tagged solid @ 7825'. RU drilling equipment. SWI & SDFN.				

**Well Name : Lisbon A 715 SWD**

Prospect:	Lisbon			AFE #:	40221
Sec/Twp/Rge:	15 / 30S / 24E			Operator:	Tom Brown, Inc.
API #:	4303716237	Field:	Lisbon Unit	Supervisor:	Rex Thompson
Work Type:	Recompletion	County, St.:	San Juan, Ut	Phone:	
Production Current/Expected	Oil: 0 / 0	Gas:	0 / 0	Water:	0 / 0
Job Purpose : Convert well to SWD.					
Date :	5/8/2003	Activity:	Fishing	Rig Name:	Days :35
Daily Report Summary :	Mill past area @ 7825' & mill on bottom				
Daily Report Detail:	Safety meeting. SITP 10 psi, SICP 10 psi. Bled pressure off well. Establish circulation w/foam. Mill 30 min making 12" from 7825' to 7826' & fell free. RIH to 8426' & tagged. RU drilling equipment, mill from 8426' to 8430' in 1 hr & from 8430' to 8431 in 2 hrs. Shoe catching torque & sticking. Very little in returns. POOH w/tbg & BHA. TIH w/4 5/8" bladed junk mill, boot basket, jars, DC's, intensifier & 32 stds tbg. SWI & SDFN				
Date :	5/9/2003	Activity:	Fishing	Rig Name:	Days :36
Daily Report Summary :	Swage csg				
Daily Report Detail:	Safety meeting. SITP 420 psi, SICP 420 psi. Bled pressure off well. Finish TIH w/tbg & BHA, tag @ 7824' w/4 5/8" bladed junk mill. Worked pipe, unable to work mill past 7824'. POOH w/tbg & BHA. Change out mill & boot basket for swage & bumper sub. TIH w/remainder of same BHA & tbg. Tag @ 7824', swage to 7827'. Worked 3 hrs, still having to jar swage through area. POOH to 7795'. SWI & SDFN				
Date :	5/10/2003	Activity:	mill on junk	Rig Name:	Days :37
Daily Report Summary :	POOH w/swage, RIH & mill on bottom				
Daily Report Detail:	Safety meeting. SITP 10 psi, SICP 10 psi. Bled pressure off well. Run through area 7824' to 7827' w/swage, had to jar up through area. Ran in well to 8420'. POOH w/tbg & BHA. Change out swage & bumper sub for 4 5/8" bladed junk mill & boot basket. TIH w/remainder of same BHA & tbg. Worked past area @ 7824'. Tagged @ 8427'. Establish circulation w/ foam. Circulate down from 8427' to 8431', mill 2 hrs & made 6". Mill catching torque & sticking. Very little material in returns. Circulate clean. POOH to 8405'. SWI & SDFN				
Date :	5/11/2003	Activity:	SDFWE	Rig Name:	Days :38
Daily Report Summary :	SDFWE				
Daily Report Detail:	SDFWE				
Date :	5/12/2003	Activity:	SDFWE	Rig Name:	Days :39
Daily Report Summary :	SDFWE				
Daily Report Detail:	SDFWE				
Date :	5/13/2003	Activity:	mill on junk	Rig Name:	Days :40
Daily Report Summary :	Mill on junk				
Daily Report Detail:	Safety meeting. SICP 900 psi. Bled pressure off csg. Establish circulation w/foam. Mill from 8431.5' to 8432.5' in 4 hrs. Mill catching torque w/very little weight, or just touching bottom. Load tbg w/30 bbl FW, POOH w/tbg & BHA. (Well started flowing after pulling 104 stds tbg from well, loaded well w/30 bbl FW). Mill rounded on bottom OD & smooth. TIH w/4 5/8" bladed mill, boot basket, BHA & 65 stds tbg. Well started flowing. SWI & SDFN				
Date :	5/14/2003	Activity:	MILL ON BP	Rig Name:	Days :41
Daily Report Summary :	Mill on BP				
Daily Report Detail:	Safety meeting. SITP 380 psi, SICP 380 psi. Bled pressure off well. Finish TIH w/4 5/8" mill, BHA & tbg. Tag @ 7824' & unable to work past area. POOH w/tbg & BHA. Change 4 5/8" mill for 4.5" mill, TIH w/remainder of same BHA & tbg. Tag @ 8430', establish circulation w/foam. Circulate down to 8432.5', mill down to 8434.5'. First 6" very slow, last 1.5' milling better. Circulate clean. SWI & SDFN				
Date :	5/15/2003	Activity:	LD TBG	Rig Name:	Days :42
Daily Report Summary :	Mill BP, RIH to bottom, LD tbg & BHA				
Daily Report Detail:	Safety meeting. SICP 700 psi. Bled pressure off csg. Establish circulation w/foam. Mill from 8434' to 8440' & fell free. RIH to 8558' & tag solid. Circulate well clean. POOH & LD tbg & BHA. SWI & SDFN				
Date :	5/16/2003	Activity:	RIH w/perf gun	Rig Name:	Days :43
Daily Report Summary :	Attempt to perforate, set down @ 7821'				
Daily Report Detail:	Safety meeting. SICP 180 psi. Bled pressure off well. RU & pump 50 bbl FW down csg. RU RMWS, RIH w/3 3/8" gun, set down at 7821', unable to work gun past 7821', taking 300# to 800# over to pull free when setting down slowly. POOH & RD RMWS. SWI & SDFN				
Date :	5/17/2003	Activity:	Repair rig	Rig Name:	Days :44
Daily Report Summary :	Change out brakes on main drum of service rig.				
Daily Report Detail:	Change out brakes on main drum of service rig.				

**Well Name : Lisbon A 715 SWD**

Prospect:	Lisbon			AFE #:	40221	
Sec/Twp/Rge:	15 / 30S / 24E			Operator:	Tom Brown, Inc.	
API #:	4303716237	Field:	Lisbon Unit	Supervisor:	Rex Thompson	
Work Type:	Recompletion	County, St.:	San Juan, Ut	Phone:		
Production Current/Expected	Oil:	0 / 0	Gas:	0 / 0	Water:	0 / 0
Job Purpose : Convert well to SWD.						
Date :	<b>5/18/2003</b>	Activity:	SDFWE	Rig Name:	Days :45	
Daily Report Summary : SDFWE						
Daily Report Detail: SDFWE						
Date :	<b>5/19/2003</b>	Activity:	SDFWE	Rig Name:	Days :46	
Daily Report Summary : SDFWE						
Daily Report Detail: SDFWE						
Date :	<b>5/20/2003</b>	Activity:	Swage csg	Rig Name:	Days :47	
Daily Report Summary : PU BHA & tbg, swage csg.						
Daily Report Detail: Safety meeting. SICP 30 psi. Bled pressure off csg. Pumped 40 bbl FW down csg. Talley rabbit, PU & TIH w/4 5/8" swage, XO, Bumper sub, Jars, 6 - 3 1/2" DC's, XO & 245 jts 2 7/8" tbg. Tagged @ 7824', swage 3 hrs making 4' to 7828'. Did not fall free & continued to jar from 5 to 20 min. to pull out. POOH to 7768'. SWI & SDFN						
Date :	<b>5/21/2003</b>	Activity:	Swage csg	Rig Name:	Days :48	
Daily Report Summary : Swage csg w/4 3/8" swage						
Daily Report Detail: Safety meeting. SICP 0 psi. RIH & tag @ 7824', jar free. POOH w/tbg & BHA. 4 5/8" swage marked on max OD area, NO marking noted on tapered area. TIH w/4 3/8" swage, Bumper sub, Jars, XO, 6 - 3 1/2" DC's, Intensifier, XO & tbg. Tag @ 7832', beat & jar through. Tag @ 7837', beat & jar through. RIH to 8558'. POOH & work through area 7810' to 7860'. Last 10 trips through swaged area w/4 3/8" swage 5,000 to 10,000# wt change. POOH to 7768'. SWI & SDFN						
Date :	<b>5/22/2003</b>	Activity:	Set Packer	Rig Name:	Days :49	
Daily Report Summary : Run swage through tight spot. Attempt to perforate (unable to get down). Set "DB" pkr. Layed down BHA & part of tbg.						
Daily Report Detail: Safety meeting. SICP 20 psi. Bled pressure off well. RIH w/tbg, BHA w/4 3/8" swage. Work through area from 7810' to 7860', first trip 15,000# wt change, last trip 5000 to 8000# wt change. RIH to 8558'. POOH w/tbg & BHA. Again 5000 to 8000# wt change from 7840 to 7820'. RU RMWS, RIH w/3 3/8" x 16' gun, set down @ 7823', unable to work deeper. RIH w/3 3/8" x 10' gun, set down @ 7821', unable to work deeper. RIH w/4.60" GR & JB, set down @ 7810'. RIH w/Baker model "DB" pkr, tied in, set down @ 7636'. Pull up & set pkr @ 7616'. POOH & RD RMWS. RIH w/DC's, POOH & LD same. RIH w/60 stds 2 7/8" tbg. POOH & LD same, RIH w/remaining 2 7/8" tbg. SWI & SDFN						
Date :	<b>5/23/2003</b>	Activity:	PU tbg	Rig Name:	Days :50	
Daily Report Summary : LD 2 7/8" tbg. PU & RIH w/seal assembly & 3.5" tbg.						
Daily Report Detail: Safety meeting. SICP 20 psi, bled pressure off well. Finish POOH & LD 2 7/8' tbg. Talley, rabbit, PU & TIH w/seal assembly, XO's, 270 jts 3.5" IJ 3SS tbg to 7580'. SWI & SDFN						
Date :	<b>5/24/2003</b>	Activity:	SI	Rig Name:	Days :51	
Daily Report Summary : Space out, ND BOP & NU tree. Test csg, OK. Acidize Leadville. RD service unit.						
Daily Report Detail: Safety meeting. SICP 20 psi. Bled pressure off well. NU tree land tbg. (IPC - Seal Assembly, XO's, 270 jts 3.5" IJ 3SS, XO, 2' & 10' EUE 8rd subs). Load csg w/60 bbl pkr fluid, test csg to 1000 psi, test good. RU Halliburton, pressure test pump & lines. Acidize Leadville prefs 8159' - 8496' w/15,000 gal 15% SWIC HCl acid using 300 - 7/8" Bio Balls, displaced w/119 bbl Clayfix H2O. Max rate 10.3 BPM, Max pressure 1115 psi. Ave rate 7.8 BPM, Ave pressure 232 psi. Vacuum on tbg @ shut down. RD Halliburton. RD Service Unit. SWI & SDFN						
Material left on location 260 jts 2 7/8" EUE 8 rd J-55 tbg, Cond. C, 8080' 3 jts 2 7/8" EUE 8 rd J-55 tbg, Cond. E, 94' 42 jts 3.5" IJ 3SS J-55 tbg, Cond. C, 1180'						
Date :	<b>5/25/2003</b>	Activity:	test annulus	Rig Name:	Days :52	
Daily Report Summary : Test csg.						
Daily Report Detail: SITP 1220 psi, SICP 260 psi. Bled pressure off tbg & csg. RU Phoenix slickline, RIH w/2.75" GR & tag @ 7616', POOH. RU R&W hot oil trk, pressure csg to 1000 psi, pressure dropped 5 psi to 995 psi in 15 min. RD slickline. RD hot oil trk, left pressure on csg. Pressure dropped 40 psi in 2 hrs.						
Date :	<b>9/28/2003</b>	Activity:	Construction	Rig Name:	Days :178	
Daily Report Summary :						
Daily Report Detail: Construction						

**Well Name : Lisbon A 715 SWD**

Prospect:	Lisbon			AFE #:	40221	
Sec/Twp/Rge:	15 / 30S / 24E			Operator:	Tom Brown, Inc.	
API #:	4303716237	Field:	Lisbon Unit	Supervisor:	Rex Thompson	
Work Type:	Recompletion	County, St.:	San Juan, Ut	Phone:		
Production Current/Expected	Oil:	0 / 0	Gas:	0 / 0	Water:	0 / 0
Job Purpose : Convert well to SWD.						

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

5. Lease Designation and Serial No.

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

6. If Indian, Allotte or Tribe Name

7. Unit Agreement Name

8. Well Name and Number

1. Type of Well

- Oil Well
- Gas Well
- Other

9. API Well Number

2. Name of Operator: EnCana Oil & Gas (USA) Inc.  
(successor in interest of Tom Brown, Inc. effective 1/1/05)

Contact: Jane Washburn  
Phone: 720/876-5431

10. Field and Pool, or Exploratory Area

3. Address and Telephone No.  
370 Seventeenth Street, Suite 1700, Denver, CO 80202

4. Location of Well

Footages: **SEE ATTACHED LIST OF WELLS**  
QQ, Sec T,R,M:

County:  
State:

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

**NOTICE OF INTENT**  
(Submit in Duplicate)

- Abandon
- Repair Casing
- Change Plans
- Convert to Injection
- Fracture Treat or Acidize
- Multiple Completion
- Other
- New Construction
- Pull or Alter Casing
- Recomplete
- Reperforate
- Vent or Flare
- Water Shut-Off

Approximate date work will start \_\_\_\_\_

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

- Abandon\*
- Repair Casing
- Change Plans
- Convert to Injection
- Fracture Treat or Acidize
- Other
- New Construction
- Pull or Alter Casing
- Recomplete
- Reperforate
- Vent or Flare
- Water Shut-Off

Change of Operator

Date of work completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.

\* Must be accompanied by a cement verification report.

12. 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.)

N9885

N2175

The merger of Tom Brown, Inc. with EnCana Oil & Gas (USA) Inc. was effective January 1, 2005. It is, therefore, requested that the Operator of all properties on the attached list be changed from Tom Brown, Inc. to EnCana Oil & Gas (USA) Inc.

RECEIVED

JAN 2 / 2005

DIV. OF OIL, GAS & MINING

13. Name (Printed/Typed) Jane Washburn		Title Operations Engineering Tech
Signature <i>Jane Washburn</i>		Date 01/24/2005

(This space for State use only)

APPROVED 2/24/05

ER

Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician

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 17<sup>th</sup> 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**

<b>FROM: (Old Operator):</b> N9885-Tom Brown, Inc. 555 17th St, Suite 1850 Denver, CO 80202 Phone: 1-(720) 876-5157	<b>TO: ( New Operator):</b> 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.



Attachment to UIC Form 5

Date: 03/07/2005

API Well Number	Well Name	Lease Number	Field Name	County Name	Qtr/Qtr	Section	Location (Twn-Rng)
43-037-16237-00-00	LISBON A-715	U 20691A	LISBON	SAN JUAN	SWNW	15	30S-24E
43-037-16516-00-00	NW USA D-1 (B-624)	UTSL 070034	LISBON	SAN JUAN	NENW	24	30S-24E
43-037-31014-00-00	LISBON UNIT A-911	UTSL 070008A	LISBON	SAN JUAN	SWSW	11	30S-24E - <i>NO</i>
43-037-31323-00-00	LISBON C-910	UTU 014903	LISBON	SAN JUAN	SWSE	10	30S-24E - <i>NO</i>
43-037-31433-00-00	LISBON B-810	UTU 014903	LISBON	SAN JUAN	NESW	10	30S-24E - <i>NO</i>

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

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

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. U-020691-A
2. Name of Operator: EnCana Oil & Gas (USA) Inc.		6. If Indian, Allottee or Tribe Name N/A
3a. Address 370 Seventeenth Street, Suite 1700 Denver, CO 80202	3b. Phone No. (include area code) 303.623.2300	7. If Unit or CA/Agreement Designation Lisbon Unit
4. Location of Well (Footage, T, R, M, or Survey Description) SWNW, Section 15. T30S R24E, SLPM 2620' FNL & 90' FWL		8. Well Name and No. Lisbon Unit A-715
		9. API Well No. 43-037-16237
		10. Field and Pool, or Exploratory Area Lisbon Field
		11. County or Parish, State San Juan County, UT

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

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 type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" 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.)

EnCana Oil & Gas (USA) Inc. plans to plug and abandon the subject well upon approval and reclaim the well site per the BLM's instructions.

Please find attached the Plug and Abandon Procedure and a wellbore diagram for the subject well, dated 4/21/2007.

**APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING**

DATE: 6/21/07  
BY: [Signature]

\* See Conditions of Approval (Attached)

Federal Approval Of This  
Action Is Necessary

**RECEIVED**

**JUN 04 2007**

**DIV. OF OIL, GAS & MINING**

COPY SENT TO OPERATOR  
Date: 6-21-07  
Initials: RM

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

Name (Printed/Typed) Jevin Croteau	Title Regulatory Analyst
Signature <u>[Signature]</u>	Date 5/30/07

**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.

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.



## **Lisbon Field A-715 (SWD)**

**Lisbon Field  
San Juan County, Utah**

**P&A Procedure**

**May 21, 2007**

Prepared by: \_\_\_\_\_  
Juliet Kissel - Operations Engineer

Reviewed by: \_\_\_\_\_  
Chris Amador - Geologist

Reviewed by: \_\_\_\_\_  
David Hill - DJ/Paradox Team Lead

Attachments:           1. Wellbore Diagram  
                              2. Production Trend

## Well Information

API Number: 43-037-162370-000

Spud Date: June 8, 1965

EnCana Working Interest 99.5037%  
Marla Sue Gordon 0.248465%  
Brian Gordon 0.248465%

### Elevations/Depths

KB to GL:	16 ft	GL elevation:	6089 ft
TD:	8,605 ft MD	PBTD:	8,570 ft MD

### Casing/Tubing Information

Surface Casing Description: 10-3/4" OD, 40.5 lb/ft, J-55 set @ 713'  
Cmt'd w/ 482sx 50/50 Poz  
Top of cement at surface

Production Casing Description: 5-1/2" OD, 18-50' KB 20 lb/ft N-80  
50-2204' 17 lb/ft J-55  
2204-7708' 15.5 lb/ft J-55  
7708-8605' 17 lb/ft J-55 set @ 8,605 ft MD  
Cmt'd w/ 800 sxs 50/50 Poz  
Top of production Cement at 4,594' (calc)

Production Casing Properties (20 lb/ft N-80, 18 ft – 50 ft):	OD:	5 1/2"
	ID:	4.778"
	Drift ID:	4.653"
	Collapse:	8830 psi
	Burst:	9190 psi
	Joint Yield Strength:	428,000 lbs
	Capacity:	0.0221 BBL/ft

Production Casing Properties (17 lb/ft J-55, 50 ft – 2204 ft, 7708 ft – 8605 ft):	OD:	5 1/2"
	ID:	4.892"
	Drift ID:	4.767"
	Collapse:	4910 psi
	Burst:	5320 psi
	Joint Yield Strength:	247,000 lbs
	Capacity:	0.0232 BBL/ft

Production Casing Properties (15.5 lb/ft J-55, 2204 ft – 7708 ft):	OD:	5 1/2"
	ID:	4.950"
	Drift ID:	4.825"
	Collapse:	4040 psi
	Burst:	4810 psi
	Joint Yield Strength:	217,000 lbs
	Capacity:	0.0238 BBL/ft

**Casing/Tubing Information (cont.)**

Tubing Description: 2-7/8" OD, 6.5 lb/ft (NOT SURE), N-80, EOT at 7619 ft

Tubing Properties: ID: 2.441"  
Drift ID: 2.347"  
Collapse: 11,160 psi  
Burst: 10,570 psi  
Joint Yield Strength: 145,000 lbs @ 100%  
Capacity: 0.0058 BBL/ft  
Annular capacity 2-7/8" tbg x 5 1/2" 20 lb/ft csg : 0.0141 BBL/ft  
Annular capacity 2-7/8" tbg x 5 1/2" 17 lb/ft csg: .0152 BBL/ft  
Annular capacity 2-7/8" tbg x 5 1/2" 15.5 lb/ft csg : 0.0158 BBL/ft

**Open Perforations**

- 8159-8163'
- 8179-8189'
- 8194-8198'
- 8208-8216'
- 8225-8229'
- 8233-8243'
- 8234-8243'
- 8250-8254'
- 8326-8420'
- 8442-8496'

See Attachment #1 for full wellbore details

## **Additional Information**

### **Objective**

Plug and abandon Lisbon A-715

### **Background Information**

Lisbon A-715 was drilled in 1965 and completed in the lower dolomite section of the Leadville formation with perforations from 8,442 ft – 8,496 ft. In 1991, the well was plugged bad to 8,435 ft and recompleted to the intervals 8,234 – 8,243 ft, 8,250 – 8,254 ft, and 8,326 – 8,420 ft. The well was subsequently put on gas lift. Due to relatively low oil and gas rates, high water production rates, and low structural position, the A-715 was shut-in during 1993 at the time Unocal expanded the Lisbon Plant and began blowdown of the gas cap. During 1997, an attempt was made to isolate water production by setting a CIBP at 8,295 ft, and numerous tight spots were encountered. The well remained shut-in until 2001 when Tom Brown, Inc. recompleted the well to the limestone section in the upper portion of the Leadville formation. The well has produced sporadically via plunger lift ever since at fairly low rates (most recently in April 2003 at 4 BOPD and 120 MCFPD) with an increasing water cut (103 BWPD in April 2003), and is often shut-in during the winter months due to flow line freezing. There are no additional pay intervals in the Leadville to test in the well.

Lisbon A-715 was converted to a salt water injection in November 2003. During the conversion to water injection part of the production casing above the pay zones appeared to collapse, and was swaged open. Since then the well has not been able to take pressure, and it has not had success as an SWD. In 2004 a wireline confirmed collapsed casing at around 7,615 ft.

### **Safety**

Safety meetings are to be held with all service company personnel prior to each job. Wellsite supervisor must notify contractors as to known hazards of which the contractors may be unaware. Well site supervisor must ensure that all workers are aware of their responsibilities and duties under the EH&S guidelines. All safety meetings will be recorded on the EnCana daily completion reports in Well Core.

**THIS IS A SOUR GAS WELL. All appropriate safety precautions must be taken to ensure the safety of personnel. Contact the EH&S representative**

### **Regulations**

All verbal notifications and approval from government regulatory agencies will be recorded on the EnCana daily report. The name of the individual contacted and the subject matter of approval or notification will be recorded.

## **P&A Procedure:**

1. MIRU pulling unit. Spot, hook up, and test all equipment. RU H<sub>2</sub>S safety equipment.
2. Blow down well if necessary. ND WH. NU and test BOP equipment.
3. POOH w/ tubing.
4. MIRU wireline service.
5. PU CIBP and set @ 8100'.

**NOTE:** Collapsed casing has been tagged previously at approximately 7,615ft. Set CIBP at first sign of collapsed casing and note setting depth. If plug manages to get past 7,615ft, use 8,100ft setting depth.

6. Dump bail 100' cement plug on CIBP.
7. Circulate 9 ppg mud from 8000' – 750' (approx. 172 bbls; adjust accordingly if setting CIBP depth is higher).
8. Perforate production casing @ 763' with 4 shots. Pressure up and pump to ensure perfs open.
9. Wireline set cement retainer @ 740'.
10. Pump 50 sacks cement out retainer.
11. Sting out of cement retainer and spot 10 sacks on retainer
12. PU to 700' with tubing and reverse circulate tubing clean (approx. 17 bbls).
13. Spot 10 sack cement plug at surface.
14. RU on surface casing and attempt to pump. If rate established, fill annulus with cement.
15. RDMO pulling unit.
16. Cut off casing 5' below ground level, weld plate on top, and install dry hole marker. (NOTE: Follow OSHA trenching rules and shoring guidelines to cut casing).

**EnCana Contacts:**

<b>Name</b>	<b>Title, Location</b>	<b>Telephone Number</b>
Kelvin Edsall	Operations Engineer, Denver	(720) 876-3564 Office (303) 909-1046 Cell
Jason Schmidt	Production Engineer, Denver	(720) 876-5550 Office (303) 482-6762 Cell
Terry Steel	EH&S, Lisbon	(970) 285-2605 Office (970) 570-9564 Cell
Rusty Calhoun	Production, Andy's Mesa	(970) 260-4268 Cell (970) 864-3304 Office
Rick Costanza	Production Supervisor, Lisbon	(435)686-7612 Office (435) 260-1671 Cell
Jevin Croteau	Regulatory, Denver	(720) 876-5339 Office
Tom Flynn	Completion Supervisor, Paradox	(970) 201-7466 cell (970) 864-3369 Office
Brent Miller	Geophysicist, Denver	(720) 876-5050 Office
Darrell Mott	Completion Supervisor, Paradox	(970) 739-3522 Cell (970) 864-3369 Office
Byron Gale	DJ/Paradox Team Lead, Denver	(720) 876-3626 Office
Jane Washburn	Engineering Tech, Denver	(720) 876-5431 Office
Matthew Davis	Geologist, Denver	(720) 876-5443 Office (303) 547-7748 Cell
Chris Williams	EH&S, Denver	(720) 876-5485 Office (303) 888-6978 Cell

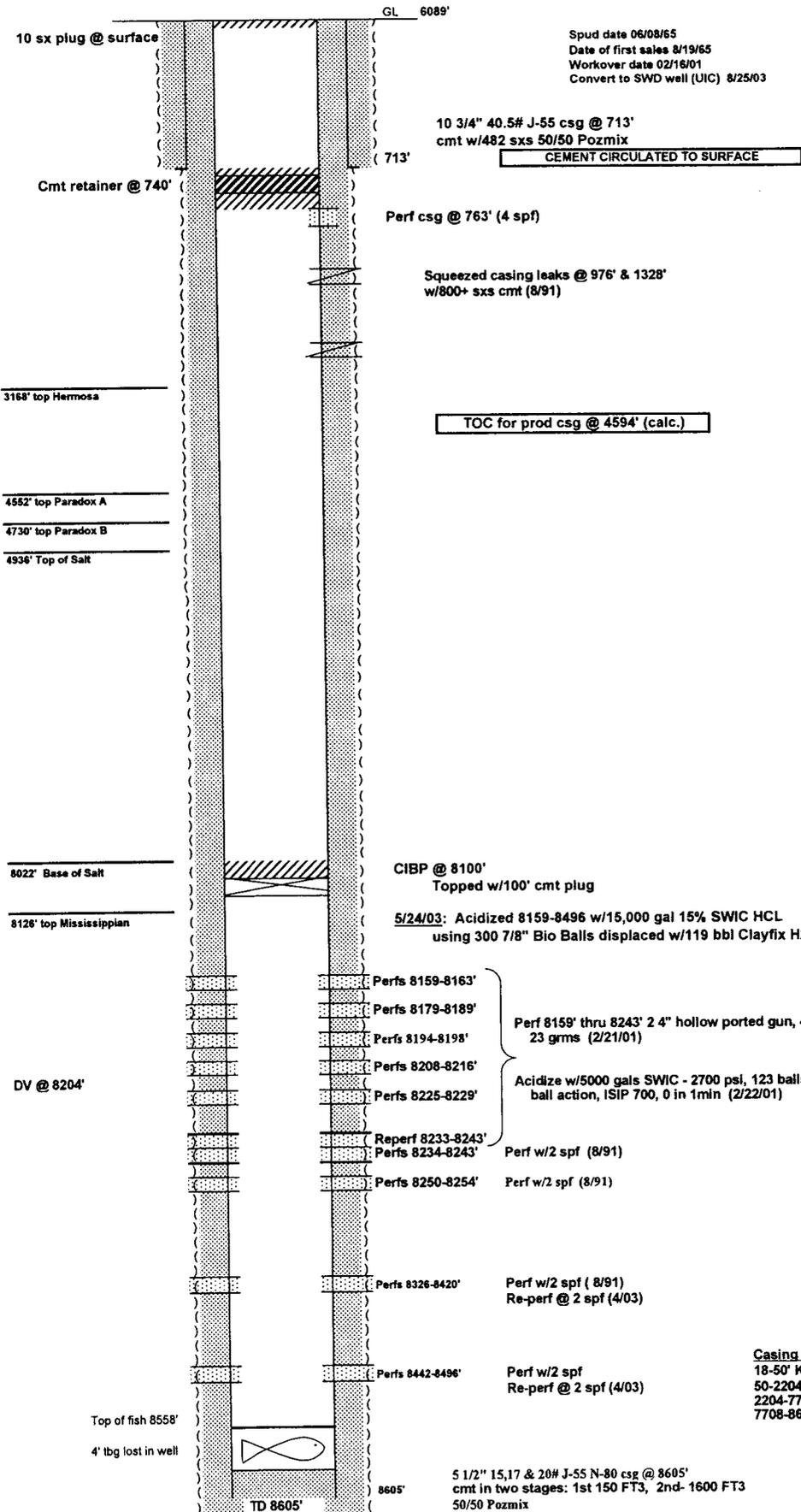
**Service Company Contacts:**

<b>Service</b>	<b>Name</b>	<b>Company, Location</b>	<b>Telephone Number</b>
Stimulation	Megan Winchell	Schlumberger, Denver	(303) 503-3021 Cell (720) 876-3708 Office
	Diego Reyes	Schlumberger, Farmington	(505) 215-3299 Cell (505) 325-5096 Office
Cementing	Victor Blanco	Schlumberger, Denver	(303) 870-5788 Cell (720) 876-3772 Office
	Diego Reyes	Schlumberger, Farmington	(505) 215-3299 Cell (505) 325-5096 Office
Retainers	Karl Caldwell	Halliburton, Denver	(303) 899-4700 Office
Perforating	Rhadd Willer	Lone Wolf, Grand Junction	(970) 241-4832 Office
Cased Hole Logging	Jeff Davis	Schlumberger, Denver	(720) 876-3787 Office
Open Hole Logging	Herb Meighan	Schlumberger, Denver	(720) 876-3536 Office
Pressure Bombs	Jeff Williams	Phoenix Services, Farmington	(505) 325-1125 Office (505) 793-1101 Cell
Snubbing		Cudd, Farmington	(505) 326-5326 Office

**WELLBORE DIAGRAM  
PROPOSED P&A**

Company: EnCana Oil & Gas (USA) Inc.  
 Lease Name: Lisbon Unit A-715  
 Location: Sec 15-T30S-R24E 2620' FNL & 125' FWL  
 County: San Juan County, Utah  
 Date: 03/28/2003  
 Revised 5/2/07 jw

KB' 6105'





**State of Utah**  
**Department of**  
**Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of**  
**Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

***CONDITIONS OF APPROVAL  
TO PLUG AND ABANDON WELL***

Well Name and Number: Lisbon A-715  
API Number: 43-037-16237  
Operator: Encana Oil & Gas (USA) Inc.  
Reference Document: Original Sundry Notice dated May 30, 2007,  
received by DOGM on June 4, 2007

Approval Conditions:

1. Notify the BLM at least 24 hours prior to conducting abandonment operations.
2. **Change Plug #1 (procedural step #5 & 6):** RIH with a CICR instead of a CIBP and if it cannot get past the collapse at  $\pm 7615'$ , then the following procedure shall be followed. Sting into CICR, establish injection rate, M&P 60 sx of cement, squeeze 50 sx below CICR, sting out of CICR and dump 10 sx on top of CICR.
3. **Add Plug #2:** A 200' plug ( $\pm 24$  sx) shall be balanced from  $\pm 4700'$  to  $4500'$  in order to isolate the base of the water zones encountered while drilling and isolate the top of the Paradox formation - R649-3-24-3.3.
4. **Add Plug #3:** A 100' plug ( $\pm 50$  sx) shall be added from  $\pm 3200'$  to  $3100'$  in order to isolate the water zones encountered while drilling in the Hermosa formation - R649-3-24-3.3. The following procedure shall be followed: Perf sqz holes @  $3200'$ , PU and RIH with a CICR and set @  $3150'$ . Sting into CICR, establish injection rate, M&P 50 sx of cement, squeeze 44 sx below CICR, sting out of CICR and dump 6 sx on top of CICR.
5. All annuli shall be cemented from a minimum depth of 100' to the surface.
6. All requirements in the Oil and Gas Conservation General Rule R649-3-24 shall apply.
7. If there are any changes to the plugging procedure or the wellbore configuration, notify Dustin Doucet at 801-538-5281 (Office) or 801-733-0983 (Home) prior to continuing with the procedure.
8. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.
9. Federal approval of this action is required.

Dustin K. Doucet  
Petroleum Engineer

June 21, 2007

Date

# Wellbore Diagram

API Well No: 43-037-16237-00-00 Permit No:

Well Name/No: LISBON A-715

Company Name: ENCANA OIL & GAS (USA) INC

Location: Sec: 15 T: 30S R: 24E Spot: SWNW

Coordinates: X: 650369 Y: 4226753

Field Name: LISBON

County Name: SAN JUAN

### String Information

String	Bottom (ft sub)	Diameter (inches)	Weight (lb/ft)	Length (ft)	Capacity (cf)
HOL1	713	15			
SURF	713	10.75	40.5	713	
HOL2	8605	8.75			
PROD	8605	5.5	20	50	8.031
PROD	8605	5.5	15.5	5504	7.483
PROD	8605	5.5	17	3051	7.661



Cement from 713 ft. to surface  
 Surface: 10.75 in. @ 713 ft.  
 Hole: 15 in. @ 713 ft.

Plug # 5 (step # 13)  
 $(10 \text{ sk}) (1.15) (8.031) = 92'$

$8\frac{3}{4}'' \times 5\frac{1}{2}'' (208) \rightarrow 2.292$   
 $10\frac{3}{4}'' \times 5\frac{1}{2}'' \rightarrow 2.591$

Plug # 4 (Steps 8-11)  
 Below outside BH  $\rightarrow 50' / (1.15) (2.292) = 19.5 \text{ sk}$   
 Inside  $\rightarrow 2.5' / (1.15) (7.661) = 3 \text{ sk}$   
 Above  $(30 \text{ sk}) (1.15) (2.591) = 90'$

### Cement Information

$(10 \text{ sk}) (1.15) (7.661) = 88'$   
 OK

String	BOC (ft sub)	TOC (ft sub)	Class	Sacks
PROD	8605	8204	PC	
PROD	8204	4594	PC	
SURF	713	0	PC	482

Add Plug # 3  
 3200' to 3100' - CIRC @ 3150' 5/8 holes @ 3200'  
 Below outside -  $100' / (1.15) (2.292) = 39.5 \text{ sk}$   
 Inside -  $50' / (1.15) (7.483) = 6 \text{ sk}$

### Perforation Information

Above  $50' = 6 \text{ sk}$   
 Add Plug # 2  
 4700' to 4500'  
 $200' / (1.15) (7.483) = 24 \text{ sk}$

Top (ft sub)	Bottom (ft sub)	Shts/Ft	No Shts	Dt Squeeze
8159	8496			

### Formation Information

Formation	Depth
HRMS	3168
PRDX	4552
MOLAS	8122
MSSP	8126

Cement from 8204 ft. to 4594 ft.  
 Cement from 8605 ft. to 8204 ft. Plug 1 (steps 5, 6) - should be CIRC

Production: 5.5 in. @ 8605 ft.  
 $(20 \text{ sk}) (1.15) (7.661) = 12 \text{ sk Cement required}$

Hole: 8.75 in. @ 8605 ft. IF cannot get below collapse @ 7615'  
 set CIRC ( $\pm 7600'$ ) string into CIRC establish injection  
 inject  $\pm 50 \text{ sk}$  below CIRC, string out and dump 10 sk on top

TD: 8605 TVD:

PBTD:

60 sk total

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>U-020691-A</b>
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.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: <b>N/A</b>
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME: <b>Lisbon Unit</b>
2. NAME OF OPERATOR: <b>EnCana Oil &amp; Gas (USA) Inc.</b>		8. WELL NAME and NUMBER: <b>Lisbon A715 SWD</b>
3. ADDRESS OF OPERATOR: <b>370 17th Street Suite 1700</b> CITY <b>Denver</b> STATE <b>Co</b> ZIP <b>80202</b>		9. API NUMBER: <b>4303716237</b>
PHONE NUMBER: <b>(720) 876-3219</b>		10. FIELD AND POOL, OR WILDCAT: <b>Lisbon Unit</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>2620' FNL &amp; 90' FWL</b>		COUNTY: <b>San Juan</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SESW 15 30S 24E 6</b>		STATE: <b>UTAH</b>

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 checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input 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 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.

**EnCana Oil & Gas (USA) Inc withdraws its original plans to plug & abandon the above referenced well until a later date.**

NAME (PLEASE PRINT) <b>Susan Guidry</b>	TITLE <b>Operations Tech</b>
SIGNATURE	DATE <b>4/29/2008</b>

(This space for State use only)

**RECEIVED**  
**MAY 01 2008**  
DIV. OF OIL, GAS & MINING



GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

June 7, 2010

EnCana Oil & Gas (USA) Inc.  
370 17<sup>th</sup> St, STE 1700  
Denver, CO 802025632

SUBJECT: Pressure Test for Mechanical Integrity, Multiple Wells, San Juan County, Utah:

To Whom It May Concern:

The Underground Injection Control Program, which the Division of Oil, Gas and Mining (DOGM) administers in Utah, requires that all Class II injection wells demonstrate mechanical integrity. Rule R649-5-5.3 of the Oil and Gas Conservation General Rules requires that the casing-tubing annulus above the packer be pressure tested at a pressure equal to the maximum authorized injection pressure or 1,000 psi, whichever is lesser, provided that no test pressure is less than 300 psi. This test shall be performed at least every five-year period beginning October 1982. The following wells now require a current test:

→ Lisbon A-715	43-037-16237	30 S	24 E	15
Belco St 4 (Lisbon B-816)	43-037-16244			
Lisbon B-814	43-037-30082			

Please make arrangements and ready wells for testing during the week of July 19<sup>th</sup> 2010, as outlined below:

1. Operator must furnish connections, and accurate pressure gauges, hot oil truck (or other means of pressuring annulus), along with personnel to assist in opening valves, etc.
2. The casing-tubing annulus shall be filled prior to the test date to expedite testing, as each well will be required to hold pressure for a minimum of 15 minutes.
3. If mechanical difficulties or workover operations make it impossible for the well(s) to be tested on this date the test(s) may be rescheduled.
4. Company personnel should meet a DOGM representative(s) at the field office or other location as negotiated.



Page 2  
June 7, 2010  
EnCanna Oil & Gas (USA) Inc.

5. All bradenhead valves with exception of the tubing on the injection well(s) must be shut-in 24 hours prior to testing.

Please contact me at (435) 820-0862 to arrange a meeting time and place or to negotiate a different date, if the date(s) specified is unacceptable.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bart Kettle', with a long horizontal flourish extending to the right.

Bart Kettle  
Environmental Scientist

bk/dj/js

cc: Dan Jarvis, Operations Manager  
Well File

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**

<b>FROM:</b> (Old Operator): N2175-EnCana Oil & Gas (USA) Inc. 370 17th Street, Suite 1700 Denver, CO 80202 Phone: 1 (303) 623-2300	<b>TO:</b> ( 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:
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		9. API NUMBER:
PHONE NUMBER: (303) 623-2300		10. FIELD AND POOL, OR WLD CAT:

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 checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: _____	<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 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) Ricardo D. Gallegos TITLE Attorney-in-Fact  
SIGNATURE *[Signature]* DATE 5/4/2010

(This space for State use only)

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

(See Instructions on Reverse Side)

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

(5/2000)

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	

**TRANSFER OF AUTHORITY TO INJECT**

Well Name and Number Lisbon A-715	API Number 4303716237
Location of Well Footage : 2620' FNL & 90' FWL County : San Juan QQ, Section, Township, Range: SWNW 15 30S 24E State : UTAH	Field or Unit Name Lisbon Lease Designation and Number U-020691-A

EFFECTIVE DATE OF TRANSFER: 5/4/2010

**CURRENT OPERATOR**

Company: ENCANA OIL & GAS (USA) INC.  
Address: 370 17th Street, Suite 1700  
city Denver state CO zip 80202  
Phone: (303) 623-2300  
Comments:

Name: Ricardo D. Gallegos  
Signature:   
Title: Attorney-in-Fact  
Date: 7/14/10

**NEW OPERATOR**

Company: Patara Oil & Gas LLC  
Address: 333 Clay Street, Suite 3960  
city Houston state TX zip 77002  
Phone: (713) 357-7171  
Comments:

Name: Edward Seeman  
Signature:   
Title: Vice President, Engineering  
Date: 7/14/10

(This space for State use only)

**Denied**

Transfer approved by: \_\_\_\_\_  
Title: \_\_\_\_\_

Approval Date: \_\_\_\_\_

Comments:

**RECEIVED**

**JUL 15 2010**

**DIV. OF OIL, GAS & MINING**



# 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  
Patara Oil & Gas, LLC  
621 17<sup>th</sup> 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 Patara 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**

<b>FROM:</b> (Old Operator): N3670- Patara Oil & Gas, LLC 600 17th Street, Suite 1900S Denver, CO 80202  Phone: 1 (303) 825-0685	<b>TO:</b> ( New Operator): N3645- CCI Paradox Upstream, LLC 600 17th Street, Suite 1900S Denver, CO 80202  Phone: 1 (303) 825-0685
---	--

CA No.		Unit:		Lisbon				
WELL NAME	SEC	TWN	RNG	API NO	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 PHONE NUMBER: (303) 825-0685
4. LOCATION OF WELL: FOOTAGES AT SURFACE: n/a COUNTY: San Juan, UT STATE: UTAH

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, ACIDIZE, ALTER CASING, CASING REPAIR, CHANGE TO PREVIOUS PLANS, CHANGE TUBING, CHANGE WELL NAME, CHANGE WELL STATUS, COMMINGLE PRODUCING FORMATIONS, CONVERT WELL TYPE, DEEPEN, FRACTURE TREAT, NEW CONSTRUCTION, OPERATOR CHANGE, PLUG AND ABANDON, PLUG BACK, PRODUCTION (START/RESUME), RECLAMATION OF WELL SITE, RECOMPLETE - DIFFERENT FORMATION, REPERFORATE CURRENT FORMATION, SIDETRACK TO REPAIR WELL, TEMPORARILY ABANDON, TUBING REPAIR, VENT OR FLARE, WATER DISPOSAL, WATER SHUT-OFF, OTHER.

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)

(5/2000)

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
COUNTY: <u>San Juan, UT</u>		10. FIELD AND POOL, OR WILDCAT: n/a
STATE: <u>UTAH</u>		

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

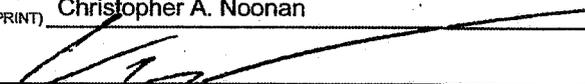
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: <u>11/1/2012</u>	<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 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 &amp; 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

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

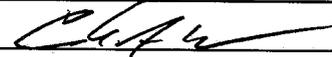
UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number Lisbon A-715	API Number 4303716237
Location of Well Footage : 2620' FNL 125' FWL County : San Juan QQ, Section, Township, Range: SWNW 16 30S 24E State : UTAH	Field or Unit Name Lisbon Lease Designation and Number U-020691-A

EFFECTIVE DATE OF TRANSFER: 11/1/2012

CURRENT OPERATOR

Company: Patara Oil & Gas LLC Name: Christopher Noonan  
Address: 600 17th Street, Suite 1900S Signature:   
city Denver state CO zip 80202 Title: Regulations & Production Reporting Supervisor  
Phone: (303) 825-0685 Date: \_\_\_\_\_  
Comments: n/a

NEW OPERATOR

Company: CCI Paradox Upstream LLC Name: Christopher Noonan  
Address: 600 17th Street, Suite 1900S Signature:   
city Denver state CO zip 80202 Title: Regulations & Production Reporting Supervisor  
Phone: (303) 825-0685 Date: \_\_\_\_\_  
Comments: n/a

(This space for State use only)

Transfer approved by:   
Title: VIC Pedologist

Approval Date: 2-6-13

Comments:

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

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:

**8910079759**

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

**Lisbon Unit**

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 Salt Water Disposal Well

8. WELL NAME and NUMBER:

**Lisbon A-715**

2. NAME OF OPERATOR:

**CCI Paradox Upstream LLC**

9. API NUMBER:

**4303716237**

3. ADDRESS OF OPERATOR:

**600 17 St. Ste 1900S** CITY **Denver** STATE **CO** ZIP **80202**

PHONE NUMBER:

**(303) 825-0685**

10. FIELD AND POOL, OR WILDCAT:

**Lisbon**

4. LOCATION OF WELL

FOOTAGES AT SURFACE: **2620 FNL, 125 FWL**

COUNTY: **San Juan**

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **SWNW 15 30S 24E**

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 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: <b>5/22/2013</b>	<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 checked="" type="checkbox"/> OTHER: <u>Pressure Test</u>
	<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 has conducted a mechanical integrity pressure test on the subject inactive salt water injection well. A pump truck was hooked up to the well and pressured up against the casing for a test period of 15 minutes. A 2,000 psi static spring was used with matching chart. The well held at approximately 1,010 psi for the duration of the test, and was then bled off down to 0 psi and returned to a shut-in state.

Please find the attached charter recorder.

Thank you.

**RECEIVED**  
**MAY 31 2013**  
DIV. OF OIL, GAS & MINING

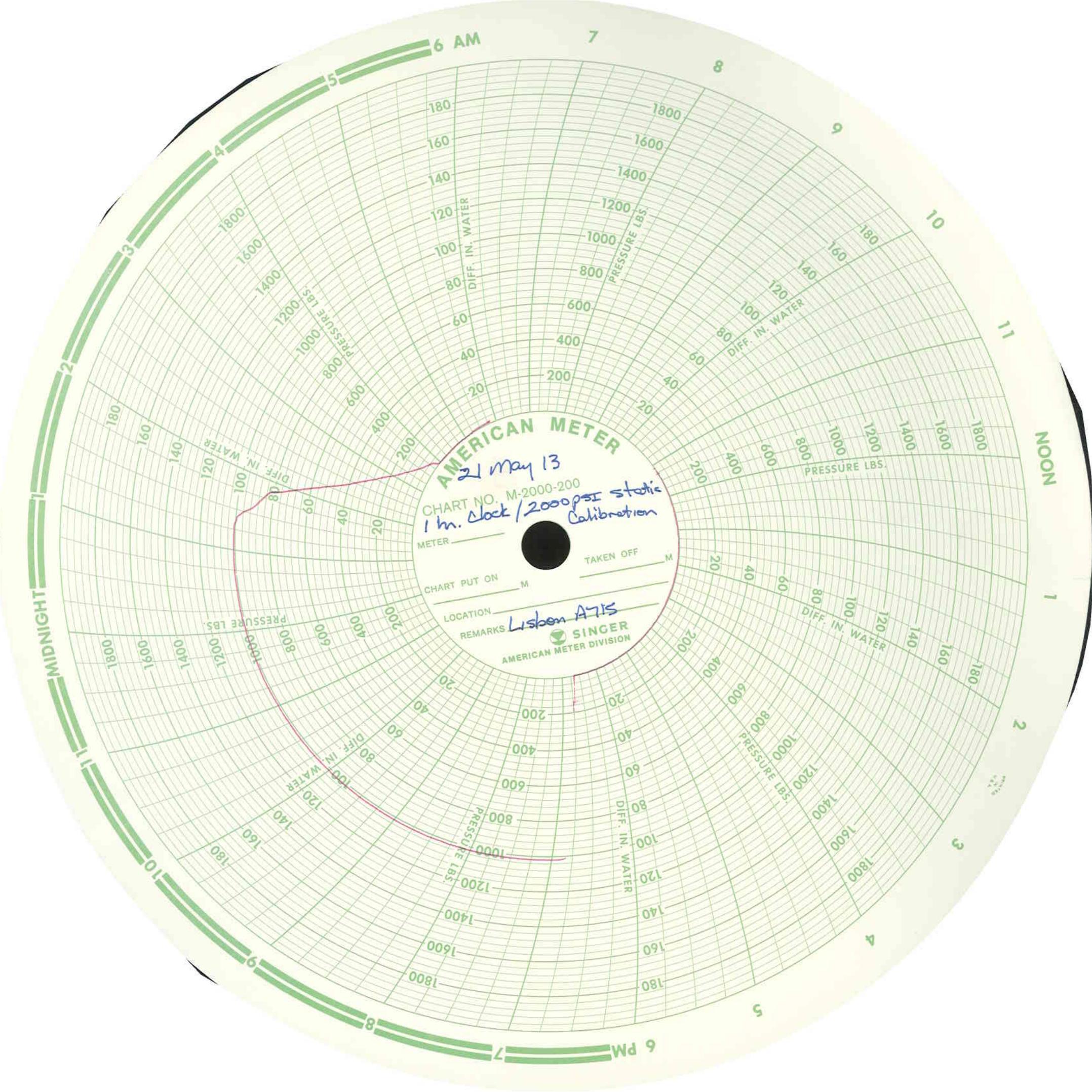
NAME (PLEASE PRINT) Christopher Noonan

TITLE Supervisor

SIGNATURE 

DATE 5/22/2013

(This space for State use only)



**AMERICAN METER**

21 May 13  
CHART NO. M-2000-200  
1 hr. clock / 2000 psi static  
Calibration

METER \_\_\_\_\_ TAKEN OFF \_\_\_\_\_ M  
CHART PUT ON \_\_\_\_\_ M

LOCATION \_\_\_\_\_  
REMARKS Lisbon A715  
**SINGER**  
AMERICAN METER DIVISION

