

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS WELL LOG ELECTRIC LOGS X WATER SANDS LOCATION INSPECTED SUB. REPORT/abd.

970821 Location Abandoned eff. 8/15/97:

DATE FILED JULY 14, 1995

LAND FEE & PATENTED STATE LEASE NO PUBLIC LEASE NO U-06922 INDIAN

DRILLING APPROVED JULY 25, 1995

SPUDED IN

COMPLETED 8/15/97 LA PUT TO PRODUCING.

INITIAL PRODUCTION

GRAVITY API

GOR

PRODUCING ZONES

TOTAL DEPTH

WELL ELEVATION.

DATE ABANDONED 8/15/97 LA'D

FIELD LISBON FIELD

UNIT LISBON UNIT

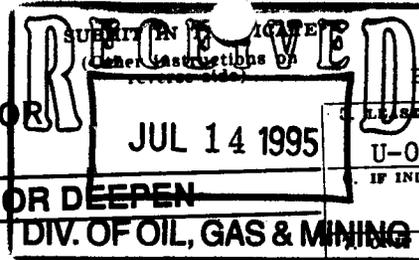
COUNTY SAN JUAN

WELL NO LISBON UNIT A-712 API NO. 43-037-31763

LOCATION 1700' FSL FT. FROM (N) (S) LINE. 755' FWL FT. FROM (E) (W) LINE NW SW 1/4 - 1/4 SEC 12

TWP	RGE	SEC	OPERATOR	TWP	RGE	SEC	OPERATOR
30S	24E	12	UNION OIL CO OF CALIF				

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
 DRILL DEEPEN

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

2. NAME OF OPERATOR
 UNION OIL COMPANY OF CALIFORNIA

3. ADDRESS AND TELEPHONE NO.
 P.O. Box 2620, Casper, WY 82602 (307) 234-1563 Ext. 116

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface: 1700' FSL & 755' FWL (NW SW)
 At proposed prod. zone: 1500' FSL & 400' FWL (NW SW) Sec. 12

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approximately 35 miles southeast of Moab, Utah

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) None

16. NO. OF ACRES IN LEASE: 600

17. NO. OF ACRES ASSIGNED TO THIS WELL: N/A - Federal Unit

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1900' (approx)

19. PROPOSED DEPTH: 9165'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 6450' GR (ungraded)

22. APPROX. DATE WORK WILL START*

5. LEASE DESIGNATION AND SERIAL NO.: U-06922

6. FARM OR LEASE NAME, WELL NO.: LISBON UNIT

7. A/R WELL NO.: A-712

8. FIELD AND POOL, OR WILDCAT: Mississippi (Leadville)

9. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 12, T30S-R24E

10. COUNTY OR PARISH: San Juan

11. STATE: Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT (cmt top)
17-1/2	13-3/8	48#	±50'	10 sx Surf.
12-1/4	9-5/8	36#	1000'	425 sx Surf.
8-3/4	5-1/2	17#	9165'	±1250 sx ±3000'

Drill 17-1/2" hole with rat-hole machine to ±50'. Set and cement 13-3/8" conductor. Move in rotary rig and equipment. Drill 12-1/4" hole to 1000' with fresh water "spud mud". Run and cement to surface 9-5/8" casing. Nipple up and test BOP equipment. Drill 8-3/4" hole w/fresh water mud system to ±3300' (Top of Salt @ ±3465'). Change mud system over to saturated salt system. Continue drilling 8-3/4" hole to 9165' TD, with a proposed 90' core in the Mississippian Leadville @ ±8525'. Run logs and if productive, run and cement 5-1/2" casing. Perforate and test zones (Mississippi) that may be productive. Complete with 2-7/8" tbg.

The BOP's will be operationally tested daily and each test logged.

NOTE: Bond coverage provided by Union Oil Company of California (BLM Bond #CA0048)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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. SIGNED: Jim Benson TITLE: Drilling Superintendent DATE: 6-28-95

PERMIT NO. 43-037-31763 APPROVAL DATE _____

Application approval 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.

CONDITIONS OF APPROVAL, IF ANY:
 APPROVED BY: Matthew TITLE: Petroleum Engineer DATE: 7/25/95

*See Instructions On Reverse Side

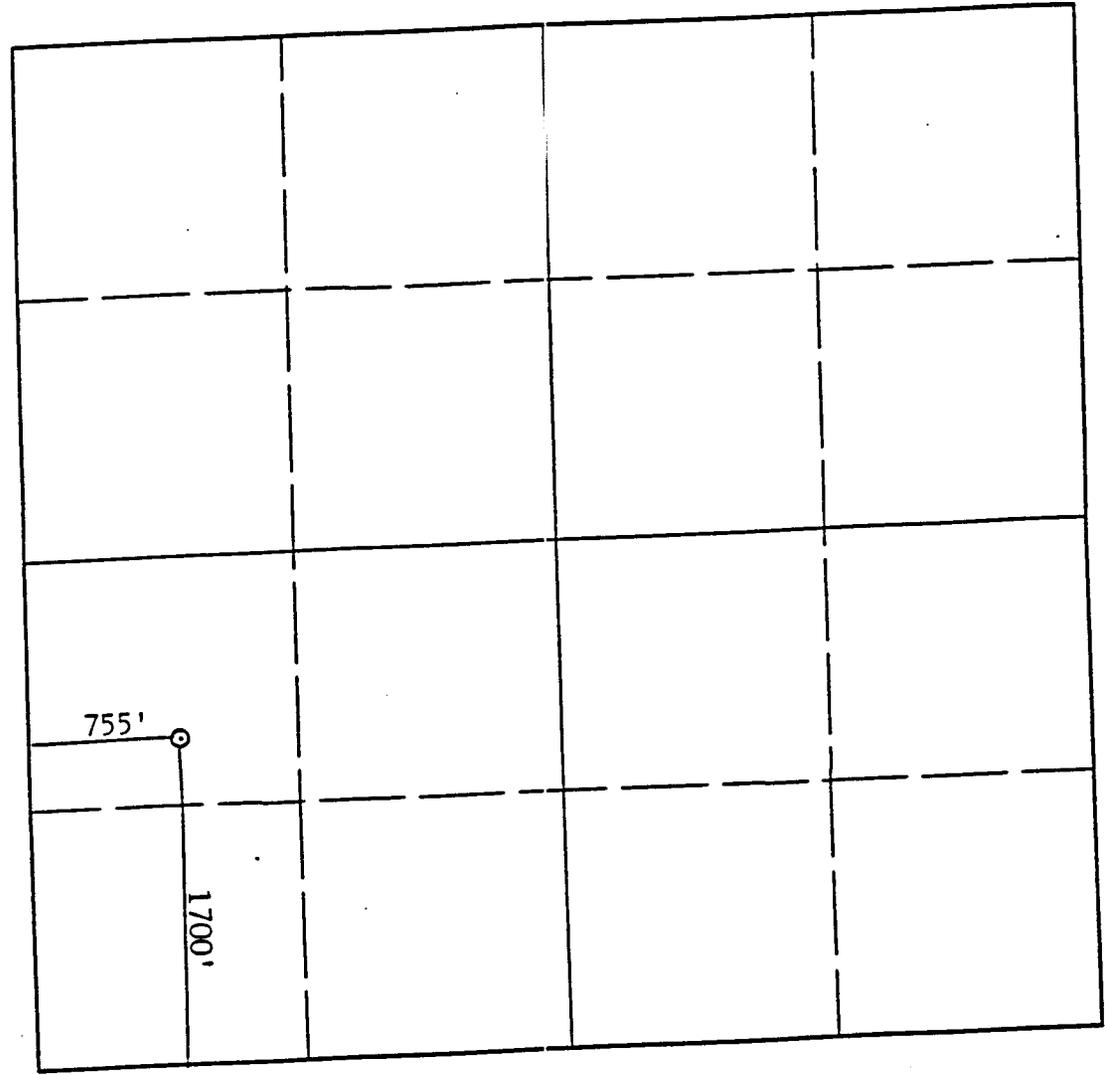
Company UNOCAL

Well Name & No. LISBON UNIT A 712

Location 1700 F/SL & 755 F/WL S.L.M.

Sec. 12 T 30 S R 24 E S.L.M. County SAN JUAN CO. Utah

Ground Elevation 6450



Scale: 1" = 1000'

Surveyed April 5 19 95

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

Cecil B. Pullis
Registered Land Surveyor
New Mexico Reg. No. 9672
Authorized by Professional Law
58 - 22 - 21 (b)

UNION OIL COMPANY OF CALIFORNIA

LISBON UNIT WELL NO. A-712
SEC. 12, T30S-R24E
SAN JUAN COUNTY, UTAH

A. DRILLING PROGRAM

1. Surface Formation: Cutler

Estimated Tops of Geological Markers:

Ground Elevation - 6450' (Ungraded)

<u>Formation</u>	<u>Depth below G.L.</u>
Cutler	Surface
Honaker Tr.	1155' MD
LaSal	2415' MD
Ismay	3105' MD
Paradox Salt	3465' MD
Base of Salt	8075' MD
Leadville (Redwall)	8215' MD
Ouray	8705' MD
Elbert	8785' MD
McCracken	8985' MD
Aneth	9075' MD
Total Depth	9165' MD

2. Estimated Depth at which Oil, Gas, Water or Other Mineral-Bearing Zones Are Expected to be Encountered:

	<u>Formation</u>	<u>Top</u>	<u>Bottom</u>
<u>Expected Oil Zones:</u>	Ismay	3105'	3200'
	McCracken	8985'	9075'
<u>Expected Gas Zones:</u>	Leadville (Redwall)	8215'	8705'

Expected Water Zones:

May encounter water flows from surface to 3100'

Expected Mineral Zone: Paradox (Potash) 3200'

3. Pressure Control BOP's: (See Attachment Nos. 1, 2, and 3)

Wellhead:

Casing Head: 9-5/8" x 10" - 3000 psi W.P.

BOP Stack:

One double-gate BOP with 4½" pipe rams and blind rams.
One choke manifold with adjustable and positive chokes.
One hydril (annular preventer) above BOP - if necessary

The BOP and choke manifold will be rated at 3000 psi.
 The annular preventer (if utilized) will be rated to 3000 psi.
 An upper and lower kelly cock will be utilized and a stabbing valve will be on the rig floor.

Test:
 BOP's and choke manifold will be pressure tested to the rated working pressure of the stack or to 70% of the interval yield of the surface casing, whichever is less, prior to drilling out of surface casing.

The annular-type preventer (if utilized) will be tested to 50% of its rated working pressure. BOP's will be operationally tested daily and each test will be logged in the IADC Daily Drilling Report.

4. Casing Program:

Conductor - 13-3/8" @ ±50'
 (Mud Wt. 9.6 ppg)

<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>New/Used</u>
0-50'	13-3/8"	48#	H-40	Welded	New

Surface Casing - 9-5/8" @ 1000'
 (Mud Wt. 9.6 ppg)

<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>New/Used</u>
0-1000'	9-5/8"	36#	K-55	ST&C	New

Production Casing - 5-1/2" @ 9165'
 (Mud Wt. 10.3 ppg)

<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>New/Used</u>
0-8805'	5-1/2"	17#	L-80/SS-95 & K-55	LT&C	New

Minimum Safety Factors

Collapse: 1:125
 Tension: 1.8
 Burst: 1.0

Cementing Program: The 9-5/8" surface casing will be cemented to surface as follows: Lead cmt--±225 sxs "lite" cement (mixed @ 12.5 lb/gal, yield 1.85 cu.ft./sx) containing 2% CaCl₂ and 1/4 lb/sx Flocele followed by 200 sxs "G" cmt (mixed @ 15.6 lb/gal, yield 1.19 cu.ft./sx) containing 2% CaCl₂ and 1/4 lb/sx Flocele.

The 5½" production casing will be cemented in 2 stages with a "DV" tool @ ±7900' as follows: Precede cement (both stages) with a 50-sx Poz Scavenger (mixed @ 13 lb/gal, yield 1.16 cu.ft./sx) containing 18% salt.

1st Stage - ±300 sx Premium cement (mixed @ 16.16 lb/gal, yield 1.19 cu.ft./sx) containing 18% salt, fluid loss, defoamer and lost circulation additives.
2nd Stage-- Lead cmt--±825 sxs "lite" cement (mixed @ 13.35 lb/gal, yield 1.76 cu.ft./sx) containing 18% salt, fluid loss, defoamer and lost circulation additives followed by 100 sxs premium cement (mixed @ 16.16 lb/gal, yield 1.19 cu.ft./sx) containing 18% salt, fluid loss, defoamer and lost circulation additives.

Casing hardware for surface casing to include guide shoe, float collar, centralized shoe joint and next five joints. Casing hardware for the production string to include guide shoe, float collar, "DV" tool @ ±7900', stand-off centralizers, turbalizers and cement baskets above and below "DV" tool where needed.

NOTE: Cement top for production casing will cover the Potash zone in the Paradox formation (estimated cement top is 3000').

5. Drilling Fluid

<u>Depth</u>	<u>Type</u>	<u>Weight</u>	<u>Vis</u>	<u>F.L.</u>
0-1000'	Gel/Lime (Spudmud)	9.0-9.6	45-65	N.C.
1000-±3300'	Fresh Wtr Mud (LSND)	8.6-9.2	40-45	<20
±3300'-TD	Sat. Salt Mud	10.0-10.3	40-45	8-10

Sufficient materials to maintain mud requirements and to meet minor lost ciruclation and threatened blowout conditions shall be stored at the location.

6. Testing, Logging, and Coring Program:

DST's: None planned.

Logging: A Dual Laterolog-MSFL/Gamma Ray-Sonic will be run from bottom of surface casing to T.D.

LDT-CNL-GR will be run from ±8000' to TD
 FMS log will be run from ±8000' to TD
 Dipmeter will be run from ±8000' to bottom of surface csg.

Cores: One 90' core in the Mississippian Leadville (Redwall) Formation from ±8525' to ±8615'.

Completion: All productive zones will be selectively perforated, treated with 50-100 gallons of 15% Hcl per ft. of perforations, and tested. If the Leadville (Redwall) formation is productive, a hydraulic fracture treatment will be proposed.

7. Abnormal Pressures, Temperatures, Potential Hazards:

No above or below normal pressures are anticipated.

<u>Formation</u>	<u>Estimated Reservoir Pressures</u>
Ismay	1000 psi
Missippian Leadville (Readwall)	2400 psi

Normal temperature gradients are anticipated.

Hydrogen sulfide gas will be present in the Mississippian Redwall Formation. The Redwall is a normal pressure gradient formation and the mud column weight should be more than sufficient to prevent free hydrogen sulfide from reaching the surface. Hydrogen sulfide scavengers will be added to the mud prior to drilling the Paradox formation. The pH of the mud will be maintained at a high level of corrosion protection. Fresh air breathing equipment will be installed at the rig site and all personnel will be trained in the use of the equipment. Hydrogen sulfide detection equipment and the warning flags will be in place and operational before drilling into the Paradox formation. An H₂S Contingency Plan is also included for approval.

8. Starting Date:

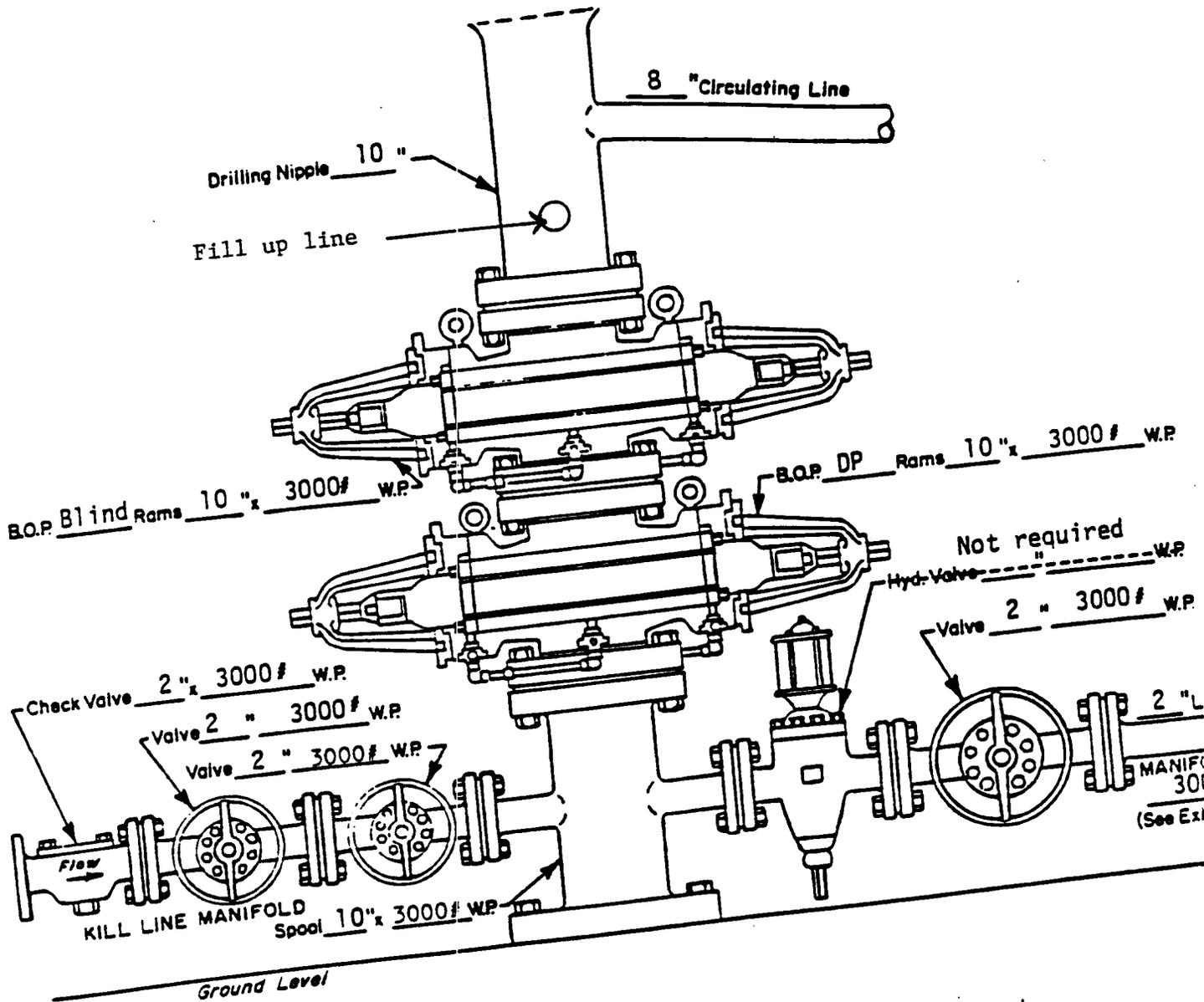
The Grand Resource Area office will be contacted 48 hours before dirt work begins (Telephone no. (801) 259-6111).

Road and location work will begin as soon as approval has been received from the Bureau of Land Management, weather permitting. Drilling should commence immediately upon approval of the APD.

Duration of Operations:

Drilling - 40 days
Completion - 15 days

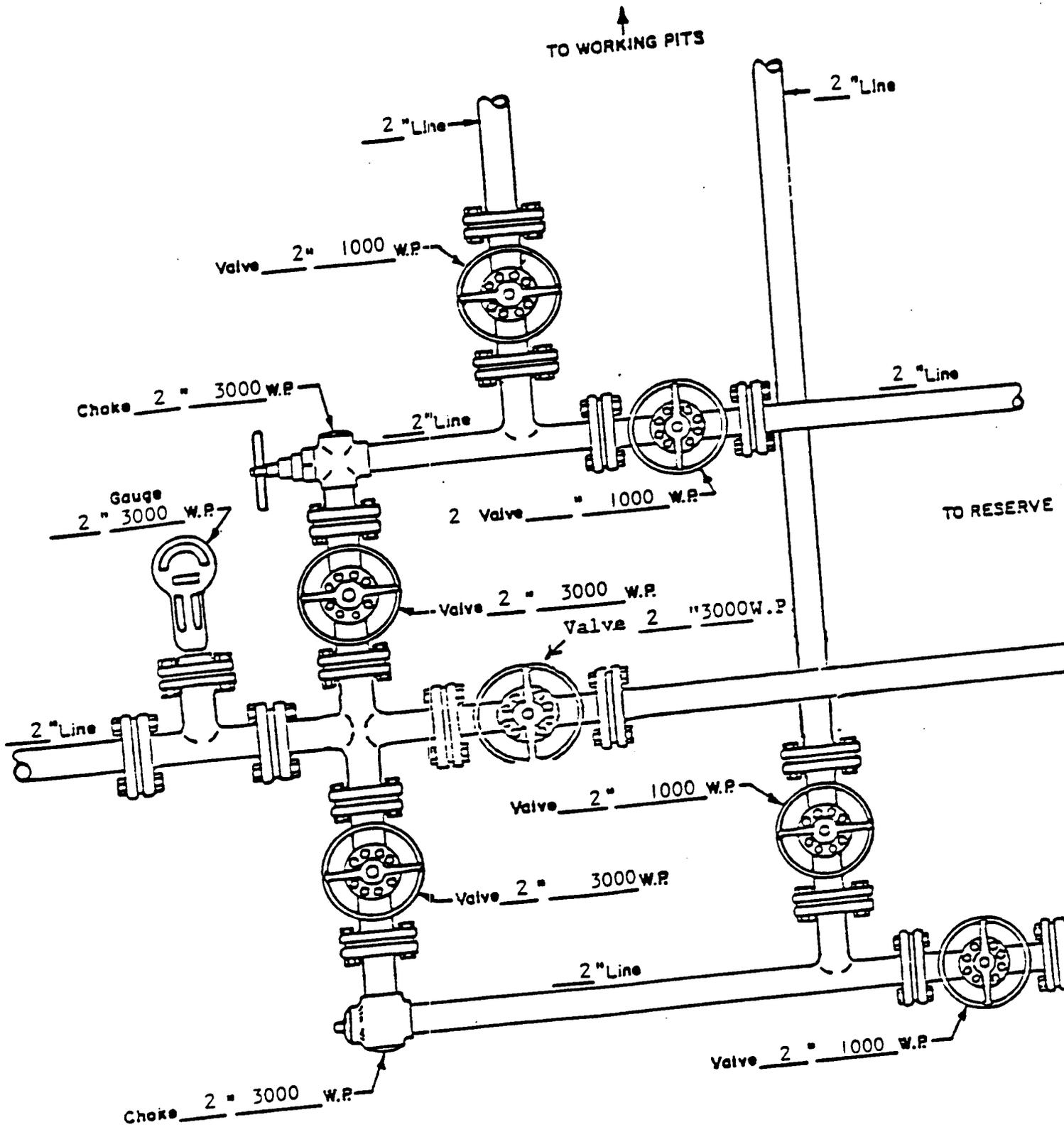
LISBON UNIT A-712
 San Juan Co., Utah



WELL HEAD B.O.P.
 3000 #W.P.

- Manual
- Hydraulic

LISBON UNIT A-712
 San Juan Co., Utah

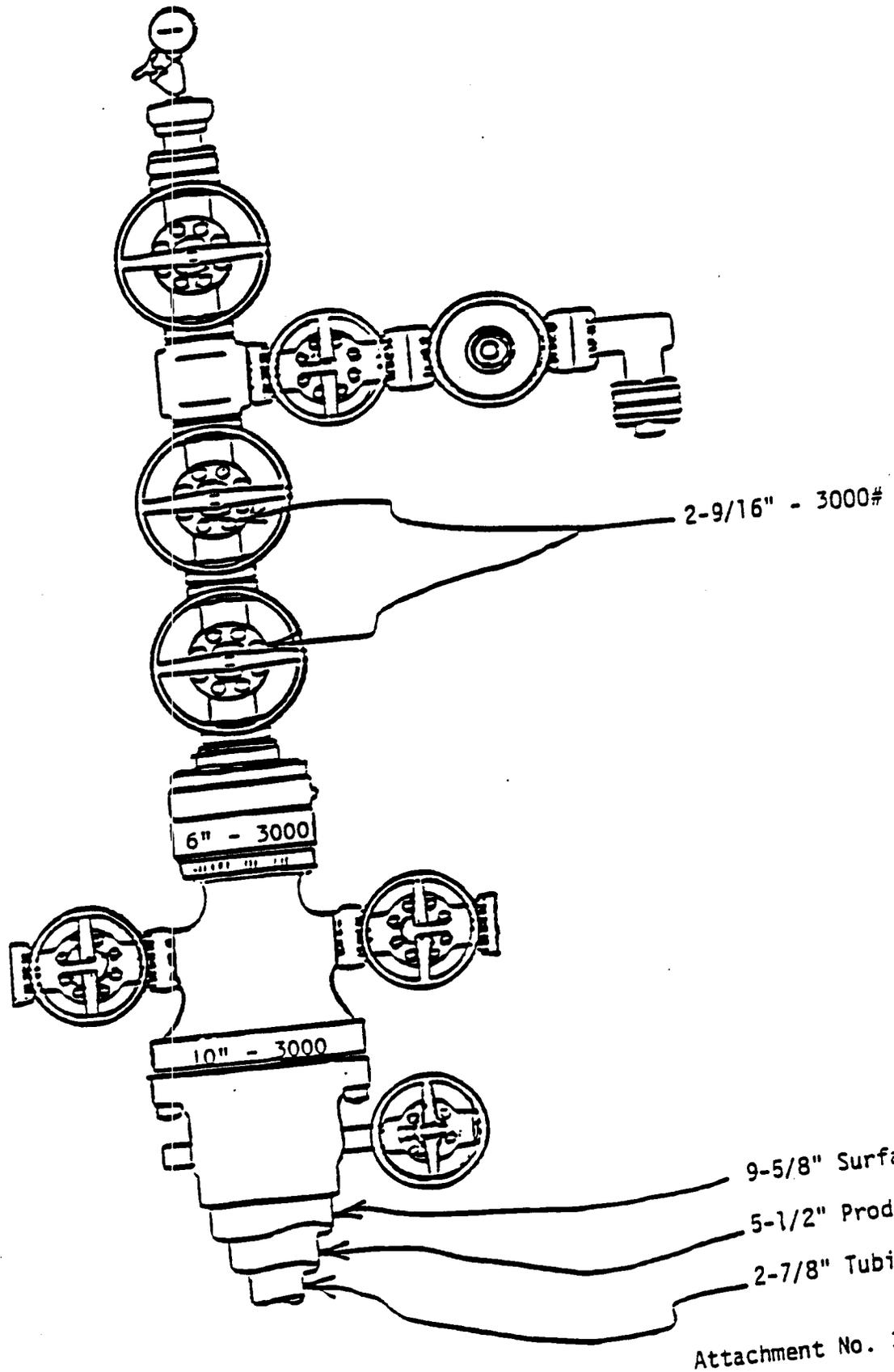


MANIFOLD
 3000 #W.P.

- Manual
- Hydraulic

ATTACHMENT NO

LISBON UNIT A-712
San Juan Co., Utah



UNION OIL COMPANY OF CALIFORNIA
LISBON UNIT WELL NO. A-712
SEC. 12, T30S-R24E
SAN JUAN COUNTY, UTAH

B. Thirteen Point Surface Use Plan

1. Existing Roads:

- a. The proposed well is approximately 37 miles south and east of Moab, Utah. The well site as staked is shown on the surveyor's plat. Four directional reference points have been staked.
- b. From Moab, Utah, proceed 22 miles south on Highway No. 163 to LaSal Junction. Turn left onto Highway 46 at LaSal Junction. Proceed 6.5 miles east on blacktop to blue sign that reads "Rio-Algom Corp., Lisbon Mine". Turn south for 9.2 miles on paved road. Turn right onto existing dirt trail and proceed .3 miles to location.
- c. An existing dirt road that leads to the proposed location will be upgraded and utilized for access.
- d. Existing roads are shown on Attachment No. 4 & 5.
- e. An encroachment permit will be applied for with the San Juan County Road Department.

2. Planned Access Roads:

- a. Approximately 2000' of an existing dirt road will be utilized for access. Approximately 1000' of the road will be re-routed and/or reconstructed.
- b. Width - Total disturbed width - 35 feet
Travel surface width - 20 feet
- c. No culverts will be needed during drilling/completion operations. A ditch will be cut along the South-Southwest and North side of the location and existing road to divert water run-off from the pad. If the well is productive, culverts may be placed in the access road where needed for long-term use.
- d. No surfacing material will be needed. No fence cuts, cattle guards or gates will be needed.

3. Location of Existing Wells:

Attachment Nos. 5 & 6 show producing wells, water wells and abandoned wells within one mile of the proposed Well A-712.

1) Water Wells	-0	6) Producing Wells	- 2
2) Abandoned Wells	-2	7) Shut-in Wells	- 3
3) Temp. Abandoned Wells	-1	8) Injection Wells	- 1
4) Disposal Wells	-0	9) Monitoring Wells	- 0
5) Drilling Wells	-0		

4. Location of Existing and/or Proposed Facilities:

- a. There are no existing facilities located within the well pad.
- b. Attachment No. 7 shows the proposed new facilities and flow lines to be constructed if the well is productive.
 - 1) All permanent production facilities will be painted one of the following colors: Largo Red, Brush Brown, or Desert Brown.
 - 2) The production pad will be approximately 350' x 225'
 - 3) No outside construction materials should be necessary.
 - 4) All equipment will either be fenced or have metal guards in place. One emergency pit will be required. It will be fenced.
 - 5) A ±1900' 4" to 6" gas gathering line will run off the northeast corner of the well pad and will follow an existing (abandoned) mining road for ±400' North. At this point it intersects, turns, and follows the main access road ±1500' in an easterly direction where it will intersect and will be tied into an existing 6" steel line running from the nearby Union Well Big Indian No. 1. This is shown on Attachments 7 & 8. The tank battery will be surrounded by a dike sufficient to hold 1½ times the capacity of the storage tanks.
 - 6) All site security regulations will be adhered to.
- c. Plan for rehabilitation of disturbed areas no longer needed for operations after construction is complete:
 - 1) The reserve pit will be fenced. When the reserve pit is dry, the pit will be backfilled and the fence will be removed.

- 2) The area of the drill site not needed for production operations, including the reserve pit, will be re-contoured to the natural level. The topsoil will be redistributed and will be reseeded with a recommended BLM seed mixture. Prior to reseeding, all disturbed areas will be scarified and left with a rough surface.
- 3) Revegetation and reseeding will take place during the next designated season per BLM stipulations.

NOTE: The BLM and Grand Resource Area will be notified forty-eight (48) hours before starting reclamation work that involves earth moving equipment and upon completion of restoration measures.

5. Location and Type of Water Supply:

- a. Water for drilling purposes will be obtained from the Rattlesnake Ranch (Permit #838-05-570) at (point of diversion) - N 580' W 65' from SE corner Sec. 8, T29S-R24E, (West Coyote wash drainage), and Union's Lisbon Valley plant water well.
- b. The water will be hauled by truck to the location along the existing roads.
- c. No water well is proposed

6. Source of Construction Materials:

- a. The proposed location will utilize soil material which is on location. No construction material will be needed.
- b. Topsoil from the location, if available, will be stockpiled at the wellsite for restoration purposes. The soil material will be obtained from the immediate area of the drilling operations and will be used to fill in the low areas.

7. Methods for Handling Waste Materials:

- a. Cuttings, salts, chemicals, drilling fluids and test fluids will be contained in the reserve pit. The reserve pit will be unlined unless porous material is encountered during the construction of the reserve pit, at which time the BLM will be contacted for a determination to line the pit. The water, mud and drilling fluids will be allowed to evaporate/dry in the pit and the remaining solids/cuttings will be buried. Used motor oil will not be disposed of in the pit or on the location. Prior to drilling, the reserve pit will be fenced on three sides with four strands of barbed wire.

- b. Drilling fluids will be disposed of in the reserve pit. The water will be allowed to dry/evaporate and the remaining solids will be buried. The top of the pit will be netted while allowing the water to evaporate.
- c. In the event of a producing well, produced fluids will be handled in a tank battery on the location. Produced water will be disposed of in accordance with NTL-2B.
- d. Chemical toilets will be utilized throughout drilling/completion operations. All sewage will be contained and disposed of at an authorized disposal site.
- e. Garbage and other waste material will be disposed of in a portable trash cage which will be completely enclosed with small mesh wire. The trash will be hauled to an approved landfill or incinerated off-site.
- f. When the rig moves out, all extraneous material will be disposed of as garbage or hauled to town. When the pits have dried, they will be backfilled and re-contoured per BLM recommendations.

8. Ancillary Facilities:

- a. No camps or airstrips will be needed.

9. Well Site Layout: (See Attachment Nos. 9, and 10)

- a. Maximum cut will be 16', maximum fill will be 27'. Depending on the size of the drilling rig, the well site dimensions will be reduced and therefore the maximum cut and fill will be reduced.
- b. No living facilities will be installed; however, two trailer houses will be on location for company personnel.
- c. The reserve pit will be unlined unless porous material is encountered during the construction of the reserve pit. If such material is encountered the BLM will be contacted for a determination to line the pit. If deemed necessary, the pit will be lined either with a 12-mil plastic material or bentonite (Gel) mixture.

10. Plans for Resonation of surface:

- a. Backfilling, leveling, contouring, and waste disposal:

The top 6" of topsoil (if available) will be removed from the location and stockpiled. After the reserve pit is dry, the pits and unused portion of the location will be backfilled, leveled, and contoured to the natural level. The topsoil will be redistributed over the area.

b. Revegetation and rehabilitation:

The location will be reseeded with a recommended BLM mixture as per BLM specifications.

c. Care of pits prior to rig release:

Prior to rig release, pits will be fenced and a netting placed over the top and so maintained until cleanup.

d. If oil is on the pit, it will be removed.

e. Immediately following the completion of operations, cleanup will commence. As soon as the pit is completely dry, the pit will be filled and cleanup finalized. Seed will be broadcast in the fall of the year.

f. If the well is productive, a gas gathering line will be installed. This line will run to the North, East and tie into an existing line running from Union's Big Indian #1 well (See Attachment Nos. 7 & 8)

Pipelines will be constructed adjacent to roads or paralleling existing right-of-ways where feasible. Changes in pipeline routes that require R.O.W., surveying, archaeological clearance, etc., will be filed under a separate permit for approval.

11. Surface Ownership:

The land in Section 12 (surface location) is owned by the Federal Government and administered by the BLM.

12. Other Information:

A. Topography, soil characteristics, geological features, etc.:

The terrain surrounding the location is a semi-arid, desert-type country. The location lies at the base of a large sandstone ridge. Cedar, sage, and desert grasses grow on the rocky, sparse topsoil. Rabbits, mule deer, and lizards are typical fauna.

B. Other surface-use activities and surface ownership of all involved lands:

The surface (Section 12) is used for livestock grazing and is administered by the BLM.

C. Proximity of water, occupied dwellings, archaeological, historical or cultural sites:

There are no reservoirs or flowing streams in the immediate area of the proposed location.

An archaeological survey has been made and archaeological clearance has been recommended. The Archaeological report has been submitted to the BLM office in Moab, Utah.

All persons working in the area and associated with the project will be informed that they are subject to prosecution for knowingly disturbing historic and/or archaeological sites or for collecting artifacts. If historical or archaeological materials are uncovered, work will be stopped and an authorized officer will be informed.

13. Operator's Field Representative and Certification:

A. Field Representative:

Mr. Jim Benson
Drilling Superintendent
Union Oil Company of California
P.O. Box 2620
Casper, WY 82602-2620

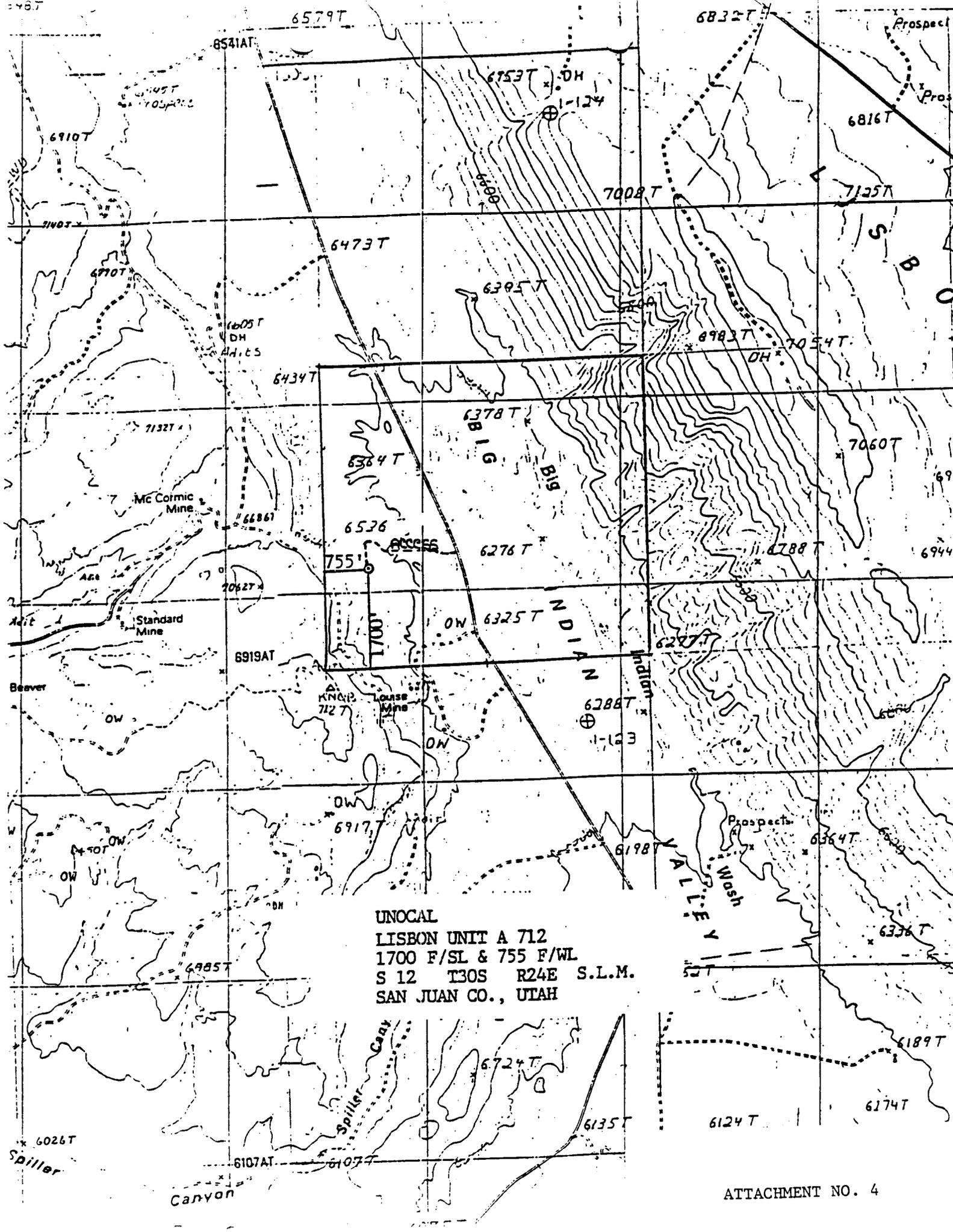
Phone (307) 234-1563 - Ext. 116

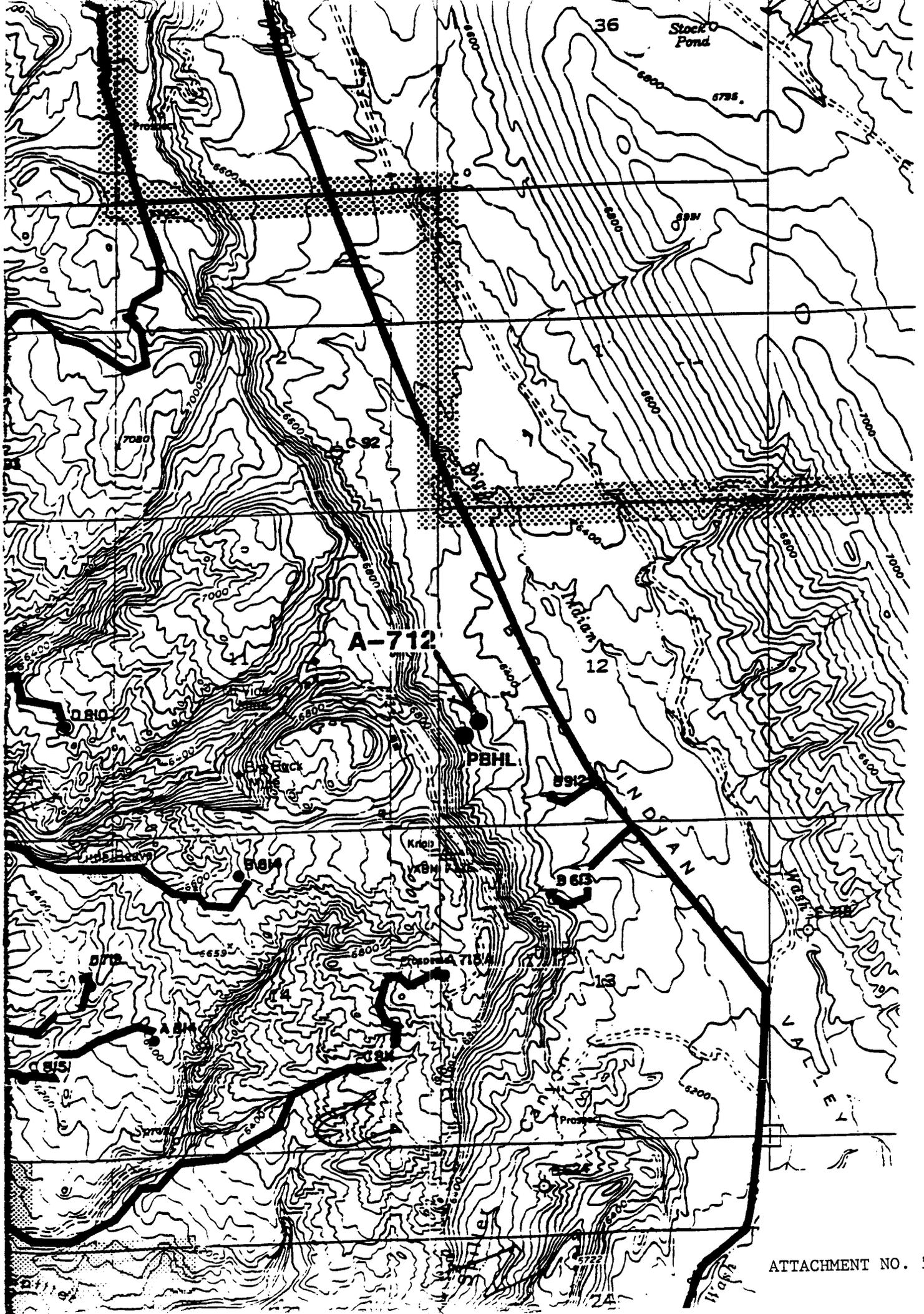
B. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Union Oil Company of California and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

6/28/95
Date

Jim Benson
Drilling Superintendent





PA boundary

C-92
10404

37-1P
3082

Lisbon Unit boundary

1 mile Radius

75-12P
4030

unit boundary

no wells in shaded area

11

SURFACE
LOCATION
PROPOSED
WELL
A-712

12

Lisbon Unit
Mississippian
Participating Area
boundary

A-91
8675

755'

1700'

B-912
9170

B-614A
9097

B-614
9022

B-613
9054

713AST
9500

A-713A
A-713-
74
9500

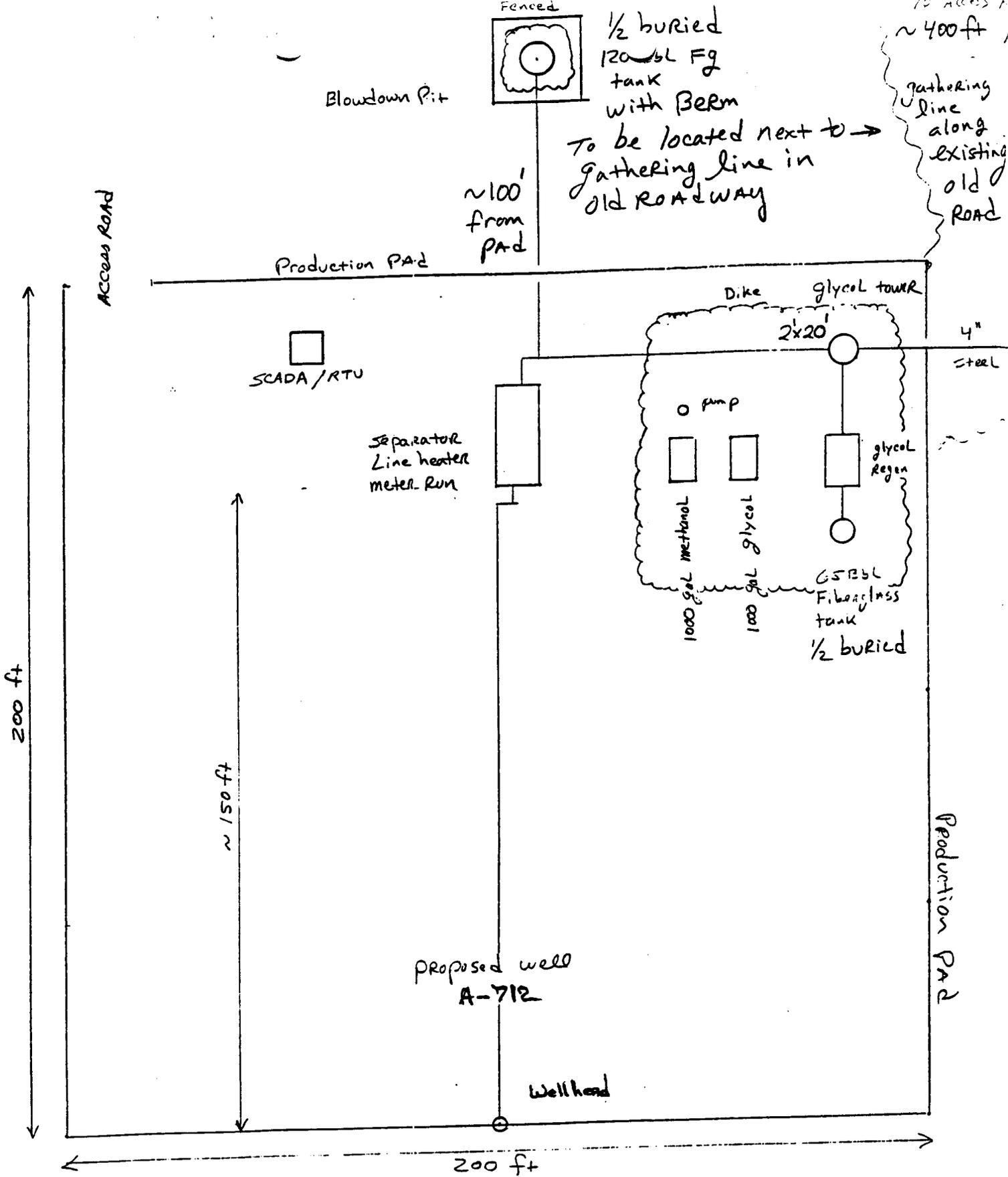
B-814
8965

14

CB14ST

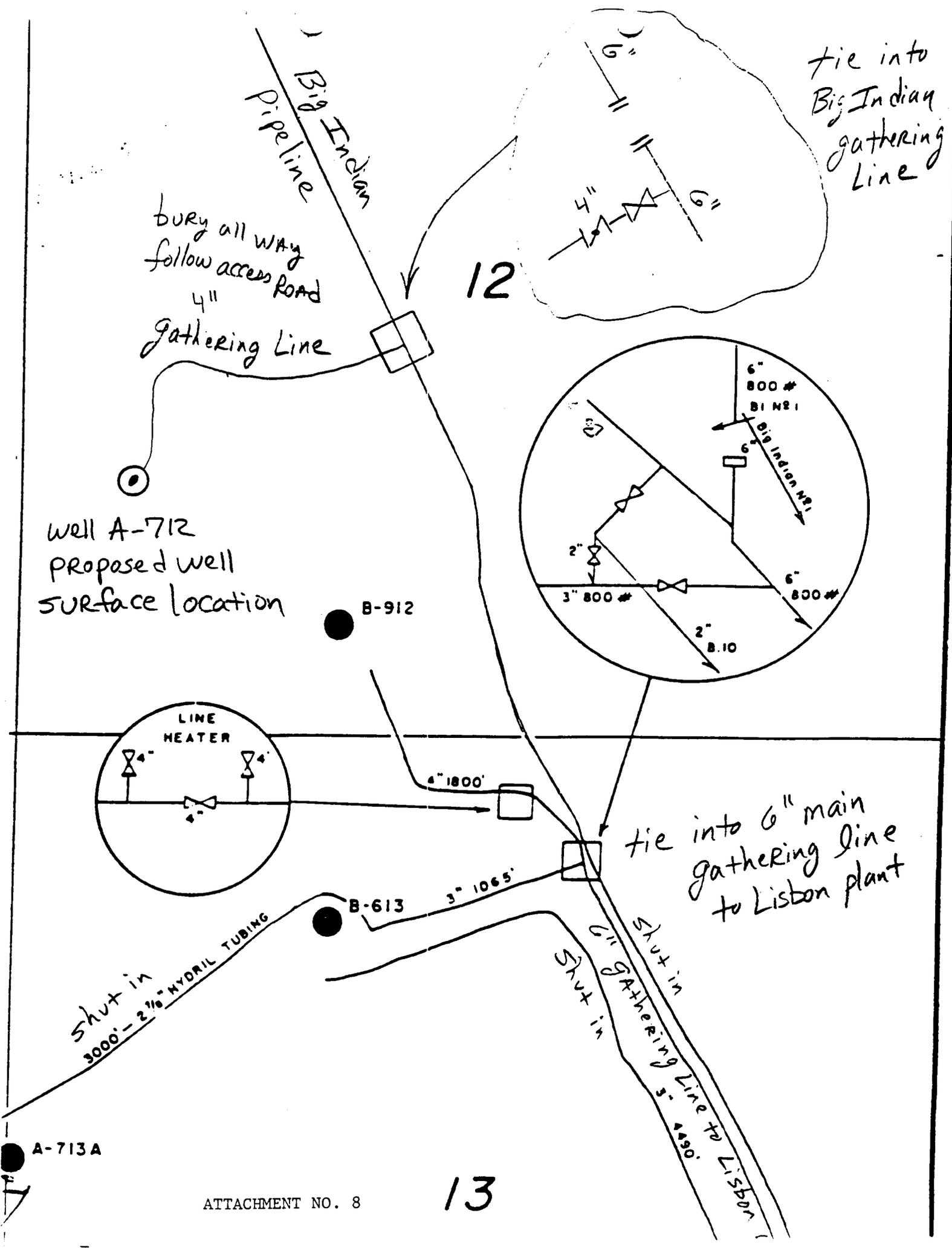
13

unit and PA boundary



ATTACHMENT NO. 7

Proposed Well A-712 Lisbon Unit		
SCALE:	APPROVED BY:	DRAWN BY S:
DATE: 5-18-95		REVISED
wellsite production equipment		
SCALE 1" = 20 ft		DRAWING NUMBER



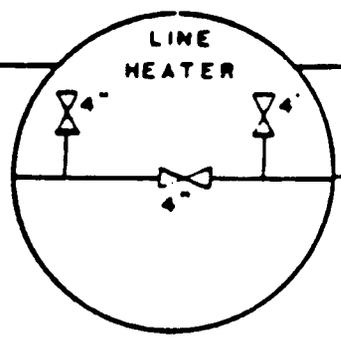
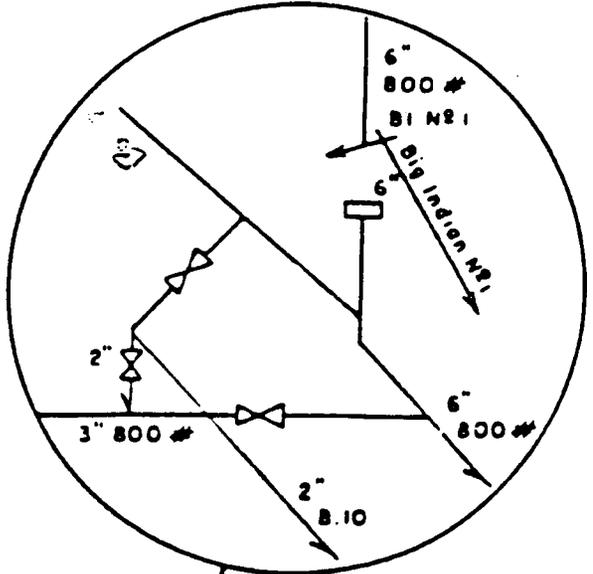
tie into
Big Indian
gathering
Line

12

Bury all way
follow access road
4"
gathering Line

Well A-712
Proposed well
surface location

B-912



tie into 6" main
gathering line
to Lisbon plant

shut in
3000' - 2 1/2" HYDRIL TUBING

B-613

4" 1800'

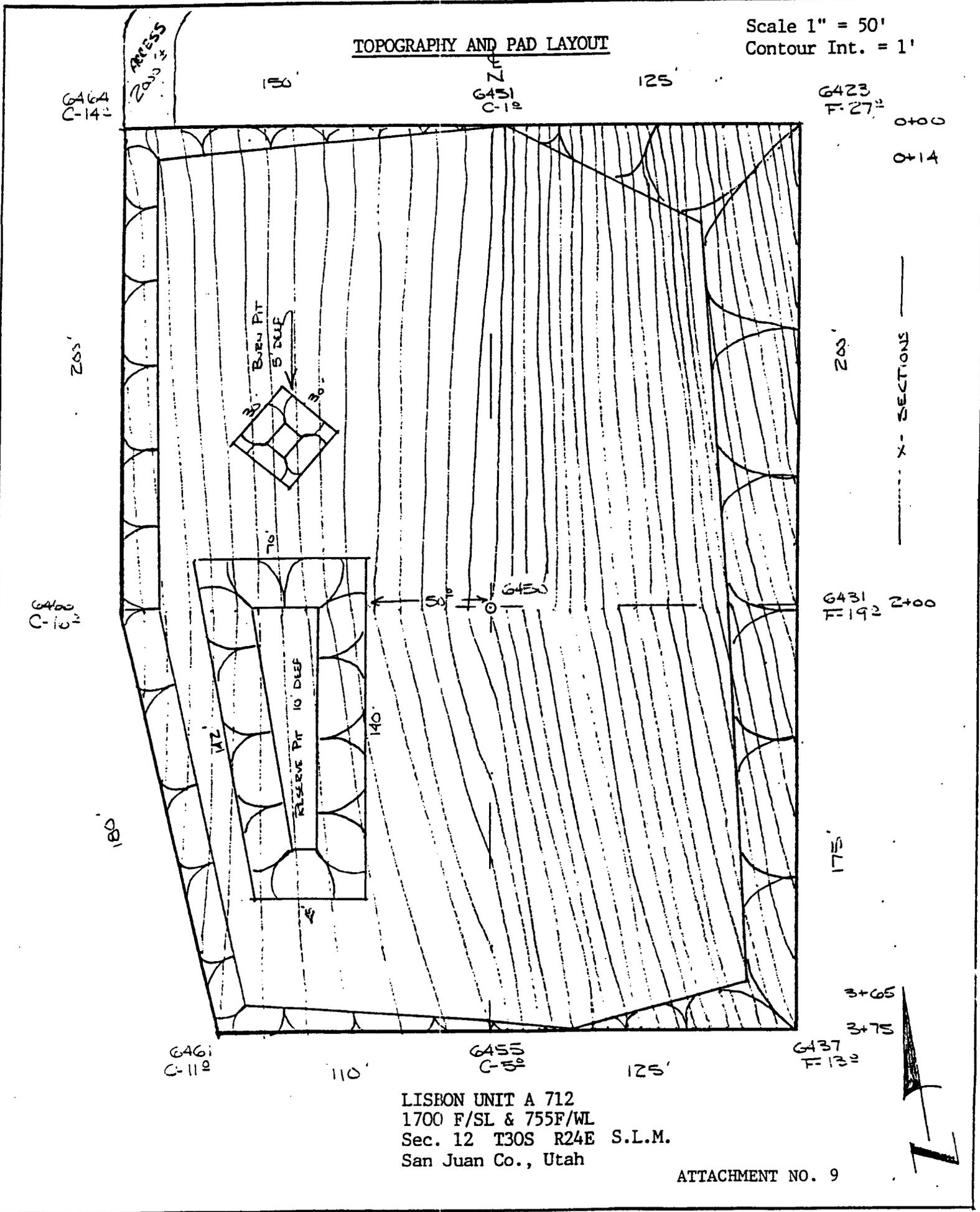
3" 1065'

A-713A

shut in
6" gathering line to Lisbon
5" 450'

TOPOGRAPHY AND PAD LAYOUT

Scale 1" = 50'
Contour Int. = 1'



LISBON UNIT A 712
1700 F/SL & 755F/WL
Sec. 12 T30S R24E S.L.M.
San Juan Co., Utah

ZERO CUT / FILL

Scale: Horz. 1" = 50'
Vert. 1" = 10'

LISBON UNIT A 712
1700 F/SL & 755 F/WL
Sec. 12 T30S R24E S.L.M.
San Juan Co., Utah

0+00

59
-136

0+14

50
-136

51
0

50
0

50
84.5

66
-150

X-SECTIONS AND VOLUMES

2+00

50
-134

RESERVE PIT
10' DEEP

50
0

50
96.5

53
125

CUT.....13717 CU YDS
FILL.....11452 CU YDS
PIT EXCAVATION.....3435 CU YDS

61
-110

3+65

50
-90

50
0

50
105.5

3+75

ZERO CUT / FILL

53
125

57
125

NOTE: CUTS @ 1.0 to 1
FILLS @ 1.5 to 1

H₂S CONTINGENCY PLAN

COMPANY NAME: Union Oil Co. of Calif. DATE: 5/23/95
ADDRESS: P.O. Box 2620 Casper, WY 82602 T.D.: 8805'
WELL NAME: Lisbon Unit A-712
LOCATION: 1700' FSL & 755 FWL Sec. 12, T305, R24E
FIELD NAME: Lisbon Valley
H₂S FORMATION: Mississippi Leadville (Redwall) DEPTH: 8215'

OPERATIONS SUPERINTENDENT:

NAME: Jim Benson OFFICE PH: 307-234-1563 HOME PH: 307-237-1730

COMPANY MAN:

NAME: Frank Gillespie OFFICE PH: 307-234-1563 HOME PH: 307-235-9047

GEOLOGIST:

NAME: Matt Duke OFFICE PH: 713-287-7644 HOME PH: 713-232-8727

RIG CONTRACTOR:

NAME: RIG NUMBER: RIG PH:

SUPERINTENDENT:

NAME: OFFICE PH: HOME PH:

TOOL PUSHERS:

NAME: HOME PH:
NAME: HOME PH:

EMERGENCY PHONE NUMBERS LIST

A. MEDICAL PERSONNEL:

1. Ambulance(s): Moab, UT 801 259-7403 or 801 259-7191
Monticello, UT 801 587-2116
St. Mary's Helicopter 800 525-4224
2. Hospital(s):
Moab, UT 801 259-7191 or 801 259-7192
Monticello, UT 801 587-2116
3. Doctor(s):
R.O. Murray Moab, UT 801 259-5151 Office
S.E. Warren Monticello, UT 801 587-2282 Office

B. FIREFIGHTING AND PUBLIC SAFETY PERSONNEL:

1. Fire Department(s): Moab, UT 801 259-5557
Monticello, UT 801 587-3224
2. Police Department(s):
3. County Sheriff: Moab, UT 801 259-8115 or 801 259-5541
Monticello, UT 801 587-2237
4. State Police: Moab, UT 801 259-5441
Monticello, UT 801 587-2662

C. GOVERNMENT AGENCIES:

1. BLM Moab, UT 801 259-6111
2. BLM Monticello, UT 801 587-2141
- 3.
- 4.
- 5.

PERSONNEL:

1. Drilling Manager: Name: D.J. Ponville
Phone#: 713-287-7602 Office
713-343-0748
2. Company Man: Name: Frank Gillespie Phone#: 307-234-1563
Name: Phone#:
3. Drilling Superintendent: Name: Jim Benson
Phone#: 307-234-1563 Office
307-237-1730 Home

I. INTRODUCTION. H₂S is a toxic, poisonous gas that could cause death or injury. The objective of this contingency plan is to provide an organized plan of action for alerting and protecting the public from H₂S exposure in the event a potentially hazardous volume is accidentally released to the atmosphere. This plan should be activated immediately if any such release occurs. The Drilling Superintendent is responsible for initiating and carrying out the plan.

II. INDIVIDUAL RESPONSIBILITIES. It is the responsibility of all personnel on the location to familiarize themselves with the procedures outlined in this contingency plan.

A. All personnel:

1. Responsible for his assigned safety equipment.
2. Responsible for familiarizing himself with the location of all safety equipment.
3. Responsible for reporting any indications of H₂S to those in the area and to a supervisor.

B. Drilling Superintendent:

1. Responsible for thoroughly understanding and seeing that all aspects of this contingency plan are enforced.
2. Responsible for implementing all phases of this contingency plan.
3. Responsible for keeping a minimum of personnel on the location during expected hazardous operations.
4. Responsible for coordinating all wellsite operations and communications in the event that an emergency condition develops.
5. Responsible for ensuring that all visitors receive an H₂S safety orientation. A visitor's log will be maintained as well as a list of all personnel on the location after drilling has progressed to the suspected H₂S formation.

III. LOCATION LAYOUT

- A. The location of at least two pre-determined safe areas to assemble at in the event of an emergency. These locations should be located 180 degrees to one another, and in the

direction of the prevailing winds.

The pre-determined safe areas for this well are: (to be determined and filled in after setting rig & equipment)

Area #1:

Area #2:

- B. The location and type of all H₂S detectors. One located at the bell nipple, one located at the shale shaker, and a third one on the rig floor. Indicate here any other additional H₂S detector locations for this well: (to be determined and filled in after setting rig & equipment)
- TYPE: LOCATION:

- C. The location and type of all air masks. Self-contained breathing apparatus for use by rig personnel for this well will be kept in the following locations: (to be determined and filled in after setting rig & equipment)
- TYPE: LOCATION:

If a cascade system is utilized, indicate the location(s):
(to be determined and filled in after setting rig & equipment)

TYPE: LOCATION:

- D. The location of wind socks or streamers. The wind direction indicators for this well will be located at: (to be determined and filled in after setting rig and equipment)
- TYPE: LOCATION:
- E. The location of any other safety equipment used, such as flare guns or bug blowers: (to be determined and filled in after setting rig and equipment)
- TYPE: LOCATION:
- F. The location of all telephones and/or means of communications. The communications for this well will be located at:
- TYPE: Rig radio and
Cellular phone
- LOCATION: On location (rig floor
and Company man's trailer)

G. Warning Signs:

1. "NO SMOKING" signs should be strategically located around the rig and rig location. The following locations are appropriate.
 - a. Doghouse
 - b. Rig floor
 - c. Substructure
 - d. Lower landing of all stairs leading to rig floor
 - e. Mud pits
 - f. Shale Shaker
2. "POISON GAS" signs should also be placed at strategic points on the locations. The following locations are appropriate.
 - a. All entrances leading to the location.
 - b. Lower landing of all stairs leading to rig floor.
 - c. All areas around substructure, including mud pits and shale shaker.
 - d. Various points along the perimeter of the radius of exposure.

NOTE: All warning signs should be black and yellow in color and of readable size at a reasonable distance.

IV. OPERATING PROCEDURES. The following operating procedures will be utilized for drilling in areas with H₂S.

- A. Plan of operation for handling gas kicks and other drilling problems. Any gas kick will be controlled by using approved well control techniques. Upon evidence that ambient H₂S concentrations have reached 10 ppm, all non-essential personnel will be evacuated to pre-designated safe areas. Personnel remaining on the rig floor will continue to control the well as the situation dictates until the area is safe to re-enter.

B. Special Operations

1. Drill Stem Tests. All drill stem tests must be closed chamber and conducted during daylight hours.
2. Coring. After a core has been cut, circulate bottoms up and monitor for H₂S. If hole conditions (and/or detectors) indicate potentially hazardous conditions, put breathing equipment on 10 stands before core barrel reaches the surface. Breathing equipment will be worn by all personnel while core barrel is pulled, broken out, and opened up, and until a safe atmosphere is indicated.

V. OPERATING CONDITIONS. Operating conditions are defined in three categories. A description of each of these conditions and the required action to take are give below.

A. CONDITION I - NORMAL OPERATING CONDITIONS, POTENTIAL DANGER, OPERATIONS UNDER CONTROL

Characterized by: Normal drilling operations and test operations in zones which contain or may contain H₂S.

Warning flag: Yellow

Alarm: None

Probable occurrence: No detectable gas present at surface.

General action: (1) Know location of safety equipment.
(2) Check safety equipment for proper function. Keep it available.
(3) Be alert for a condition change.
(4) Follow instructions of supervisor.

B. CONDITION II - POTENTIAL TO MODERATE DANGER TO LIFE

Characterized by: H₂S gas present. Concentrations less than 10 ppm.

Warning flag: Orange

Alarm: Flashing light at 10 ppm H₂S.
Intermittent blasts on horn at 10 ppm H₂S.

Probable occurrence:

- (1) As drill gas
- (2) As trip gas when circulating bottoms up.
- (3) When a core barrel is pulled.
- (4) When a well kick is circulated out
- (5) Surface pressure, well flow or lost returns problems.
- (6) Equipment failure during testing operations.

General action:

- (1) Follow instructions of supervisor
- (2) Put on breathing equipment if directed, or if conditions warrant it.
- (3) Stay in "SAFE BRIEFING AREA" if instructed and not working to correct the problem.
- (4) The Drilling Superintendent will initiate action to reduce the H₂S concentration to zero.

C. CONDITION III - MODERATE TO EXTREME DANGER TO LIFE

Characterized by: H₂S present in concentrations at or above 10 ppm. Critical well operations or well control problems. In the extreme, loss of well control.

Warning flag: Red

Alarm: Flashing light and continuous blast on horn at 10 ppm H₂S.

Probable occurrence:

- (1) As drill gas
- (2) As trip gas when circulating bottoms up.

- (3) When a core barrel is pulled
- (4) When a well kick is circulated out
- (5) Surface pressure, well flow or lost returns problems.
- (6) Equipment failure during testing operations.

General action:

- (1) Put on breathing equipment. Move to "SAFE BRIEFING AREA" and remain there if not working to correct or control problems.
- (2) Follow instructions of Drilling Superintendent or other supervisor.
- (3) The Drilling Superintendent will initiate emergency action as provided in the contingency plan and as appropriate to the actual conditions. If testing operations are in progress, well will be shut-in.
- (4) The Drilling Superintendent will conduct any necessary operations with an absolute minimum of personnel. All persons in the immediate area will wear a breathing apparatus. All other personnel will restrict their movements to those directed by the Superintendent.
- (5) If gas containing hydrogen sulfide is ignited, the burning hydrogen sulfide will be converted to sulfur dioxide which is poisonous.

VI. EMERGENCY PROCEDURES. The procedures listed below apply to drilling and testing operations.

- A. If at any time during Condition I, the mud logger, mud engineer, or any other person detects H₂S, he will notify the Drilling Superintendent. All personnel should keep alert to the Drilling Superintendent's orders. He will:

1. Immediately begin to ascertain the cause or the source of the H₂S and take steps to reduce the H₂S concentration to zero. This should include having the mud engineer run a sulfide and pH determination on the flowline mud if water-base mud is in use. If an oil-base mud is in use, the mud engineer should check the lime content of the mud.
 2. Order non-essential personnel out of the potential danger area.
 3. Order all personnel to check their safety equipment to see that it is working properly and in the proper location. Persons without breathing equipment will not be allowed to work in a hazard area.
 4. Notify the Contract Supervisor of condition and action taken.
 5. Increase gas monitoring activities (portable H₂S detectors) and continue operations with caution.
 6. Display the orange warning flag.
- B. If the H₂S concentration exceeds 10 ppm, the following steps will be taken:
1. Put on breathing equipment
 2. Display red flag
 3. Driller - prepare to shut the well in.
 - a. Pick up pipe to get kelly out of BOP's.
 - b. Close BOP's if necessary.
 4. If testing operations are in progress, the well will be shut-in.
 5. Help anyone who may be affected by gas.
 6. Evacuate quickly to the "SAFE BRIEFING AREA" if instructed or conditions warrant.

C. In the event a potentially hazardous volume of H₂S is released to the atmosphere, the following steps must be taken to alert the public:

1. Remove all rig personnel from the danger area and assemble at a pre-determined safe area, preferably upwind from the well site.
2. Alert the drilling office, public safety personnel, regulatory agencies, and the general public of the existence and location of an H₂S release. See List of Emergency Telephone Numbers.
3. Assign personnel to block any public road (and access road to location) at the boundary of the area of exposure. Any unauthorized people within the area should be informed that an emergency exists and be ordered to leave immediately.
4. Request assistance from public safety personnel to control traffic and/or evacuate people from the threatened area.

VII. TRAINING PROGRAM. All personnel associated with the drilling operations will receive training to insure efficient and correct action in all situations. This training will be in the general areas of: (1) personnel safety, (2) rig operations, and (3) well control procedures.

A. Personnel Safety Training. All personnel shall have received H₂S training in the following areas:

1. Hazards and characteristics of H₂S.
2. Effect on metal components of the system.
3. Safety precautions.
4. Operation of safety equipment and life support systems.
5. Corrective action and shutdown procedures.

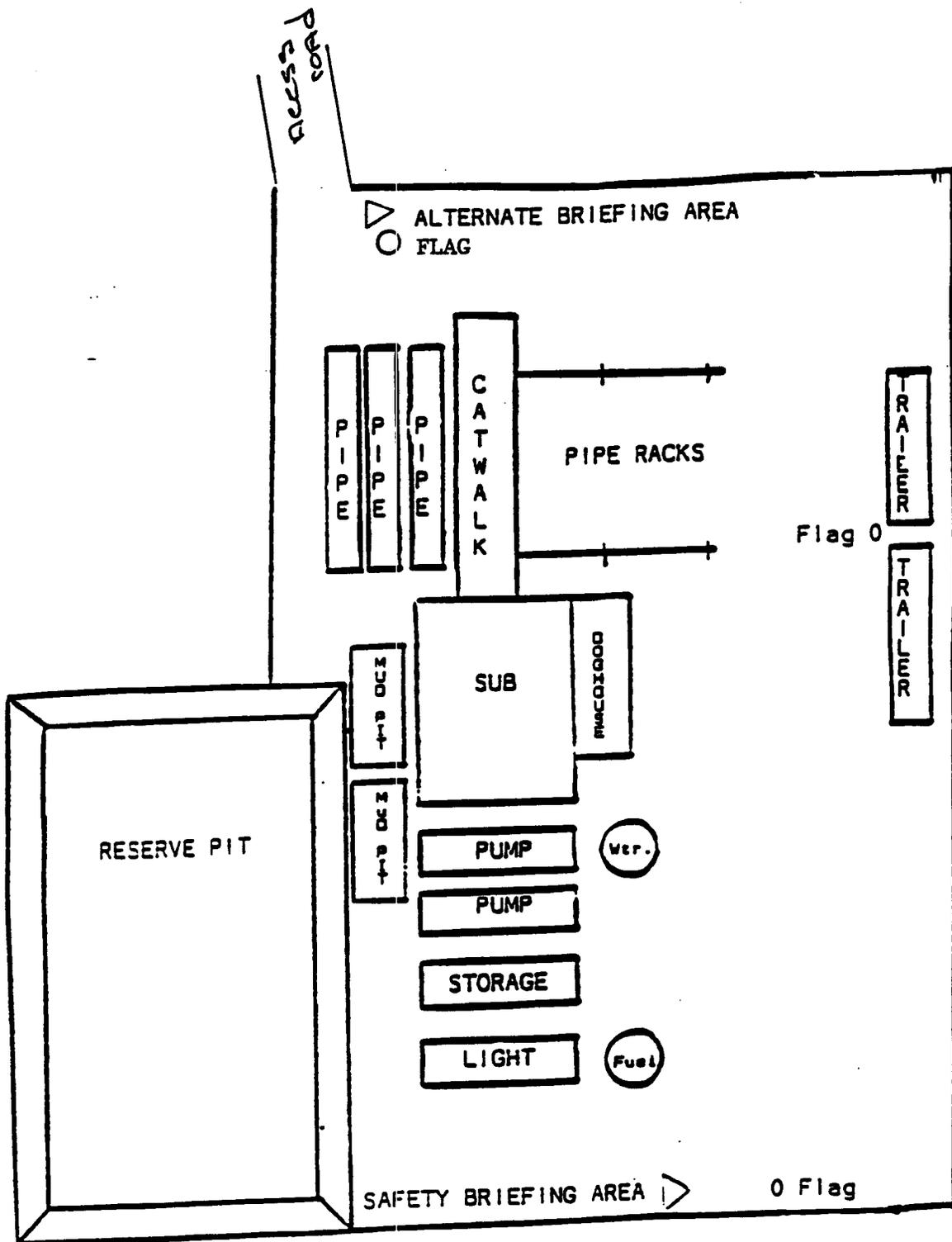
B. Rig Operations. All rig personnel shall have received training in the following areas:

1. Well control procedures.
2. Layout and operations of the well control equipment.

NOTE: Proficiency will be developed through BOP drills which will be documented by the Drilling Superintendent.

- C. Service Company Personnel. All service personnel shall have been trained by their employers in the hazards and characteristics of H₂S and the operation of safety equipment and life support systems.
- D. Visitors. All first time visitors to the location will be required to attend a safety orientation. The Drilling Superintendent shall be responsible for this orientation, and he shall see that every visitor is logged in correctly.
- E. Public. The public within the area of exposure shall be given an advance briefing by the Drilling Superintendent. This briefing must include the following elements:
 - 1. Hazards and characteristics of hydrogen sulfide. It is an extremely dangerous gas. It is normally detectable by its "rotten-egg" odor, but odor is not a reliable means of detection because the sense of smell may be dulled or lost due to intake of the gas. It is colorless, transparent, and flammable. It is heavier than air and may accumulate in low places.
 - 2. The necessity of an emergency action plan. Due to the danger to persons exposed to hydrogen sulfide and the need for expeditious action should an emergency occur, this action plan will be put into effect if and when a leak occurs.
 - 3. The location of hydrogen sulfide within the area of exposure. At the drilling location.
 - 4. The manner in which the public will be notified of an emergency. By telephone or personal contact.
 - 5. Steps to be taken in case of an emergency.
 - a. Abandon danger area.
 - b. Notify necessary agencies and request assistance for controlling traffic and evacuating people.

H₂S Safety Layout



NOTE: The actual location and placement of safe briefing areas, flags, and breathing equipment will be determined after setting rig and equipment.

Scale: 1" = 50'

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 07/14/95

API NO. ASSIGNED: 43-037-31763

WELL NAME: LISBON UNIT A-712
OPERATOR: UNION OIL COMPANY OF CAL (N9625)

PROPOSED LOCATION:
NWSW 12 - T30S - R24E
SURFACE: 1700-FSL-0755-FWL
BOTTOM: 1500-FSL-0400-FWL
SAN JUAN COUNTY
LISBON FIELD (385)

INSPECT LOCATION BY: / /		
TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: FED
LEASE NUMBER: U - 06922

PROPOSED PRODUCING FORMATION: LDLL

RECEIVED AND/OR REVIEWED:

Plat

Bond: Federal State Fee
(Number CA 0048)

Potash (Y/N)

Oil shale (Y/N)

Water permit
(Number 938-05-570)

RDCC Review (Y/N)
(Date: _____)

LOCATION AND SITING:

R649-2-3. Unit: UTU 630370

R649-3-2. General.

R649-3-3. Exception.

Drilling Unit.
Board Cause no: _____
Date: _____

COMMENTS: _____

STIPULATIONS: _____

STATE OF UTAH

Operator: UNION OIL OF CALIFORNI	Well Name: LISBON UNIT A-712
Project ID: 43-037-31763	Location: SEC. 12 - T308 - R24E

Design Parameters:

Mud weight (10.30 ppg) : 0.535 psi/ft
 Shut in surface pressure : 3996 psi
 Internal gradient (burst) : 0.099 psi/ft
 Annular gradient (burst) : 0.000 psi/ft
 Tensile load is determined using buoyed weight
 Service rating is "Sweet"

Design Factors:

Collapse : 1.125
 Burst : 1.00
 8 Round : 1.80 (J)
 Buttress : 1.60 (J)
 Other : 1.50 (J)
 Body Yield : 1.50 (B)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	5,000	5.500	17.00	K-55	LT&C	5,000	4.767	
2	3,000	5.500	17.00	L-80	LT&C	8,000	4.767	
3	1,165	5.500	17.00	S-95	LT&C	9,165	4.767	

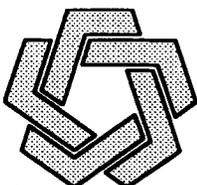
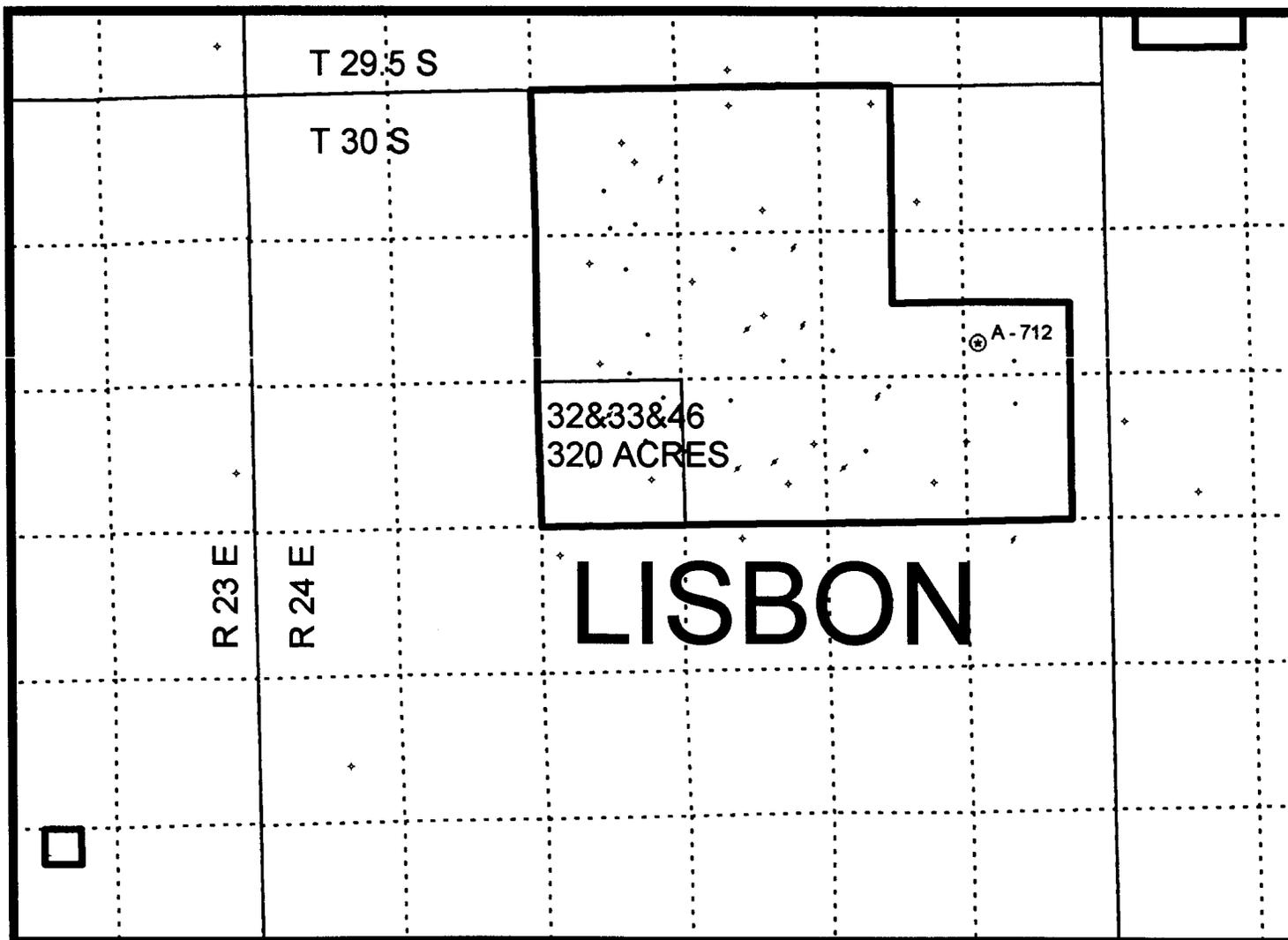
	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Load (kips)	Tension Strgth (kips)	S.F.
1	2675	4521	1.690	4491	5320	1.18	131.27	272	2.07 J
2	4281	6206	1.450	4788	7740	1.62	59.65	338	5.67 J
3	4904	8580	1.750	4904	9190	1.87	16.69	392	23.49 J

Prepared by : MATTHEWS, Salt Lake City, UT
 Date : 07-25-1995
 Remarks :

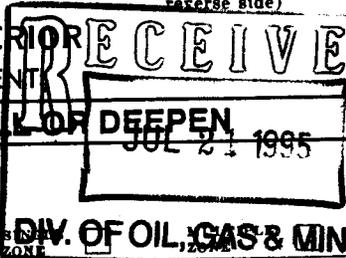
Minimum segment length for the 9,165 foot well is 1,000 feet.
 SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 120°F (Surface 74°F , BHT 166°F & temp. gradient 1.000°/100 ft.)
 The mud gradient and bottom hole pressures (for burst) are 0.535 psi/ft and 4,904 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)

UNION OF CALIFORNIA
LISBON UNIT A-712 INFILL
SEC. 12, 30S, 24E
SAN JUAN COUNTY, UNIT SPACING



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



LEASE DESIGNATION AND SERIAL NO.

U-06922

INDIAN, ALLOTTEE OR TRIBE NAME

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL

DEEPEN

b. 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 2620, Casper, WY 82602 (307) 234-1563 Ext. 116

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

1700' FSL & 755' FWL (NW SW)

At proposed prod. zone

1500' FSL & 400' FWL (NW SW) Sec. 12

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

Approximately 35 miles southeast of Moab, Utah

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

220'

None

16. NO. OF ACRES IN LEASE

600

17. NO. OF ACRES ASSIGNED TO THIS WELL

N/A - Federal Unit

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

1900' (approx)

19. PROPOSED DEPTH

9165'

20. ROTARY OR CABLE TOOLS

Rotary

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

6450' GR (ungraded)

22. APPROX. DATE WORK WILL START*

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT (cmt top)	
17-1/2	13-3/8	48#	±50'	10 sx	Surf.
12-1/4	9-5/8	36#	1000'	425 sx	Surf.
8-3/4	5-1/2	17#	9165'	±1250 sx	±3000'

Drill 17-1/2" hole with rat-hole machine to ±50'. Set and cement 13-3/8" conductor. Move in rotary rig and equipment. Drill 12-1/4" hole to 1000' with fresh water "spud mud". Run and cement to surface 9-5/8" casing. Nipple up and test BOP equipment. Drill 8-3/4" hole w/fresh water mud system to ±3300' (Top of Salt @ ±3465'). Change mud system over to saturated salt system. Continue drilling 8-3/4" hole to 9165' TD, with a proposed 90' core in the Mississippian Leadville @ ±3525'. Run logs and if productive, run and cement 5-1/2" casing. Perforate and test zones (Mississippi) that may be productive. Complete with 2-7/8" tbg.

The BOP's will be operationally tested daily and each test logged.

NOTE: Bond coverage provided by Union Oil Company of California (BLM Bond #CA0048)

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A
Dated 1/1/80

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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. SIGNED Jim Benson TITLE Drilling Superintendent

(This space for Federal or State office use)

PERMIT NO. 43-037-31763

APPROVAL DATE

Application approval 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.

CONDITIONS OF APPROVAL, IF ANY:

/S/ WILLIAM C. STRINGER

Associate District Manager

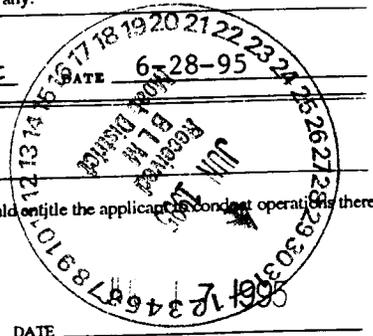
APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

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.



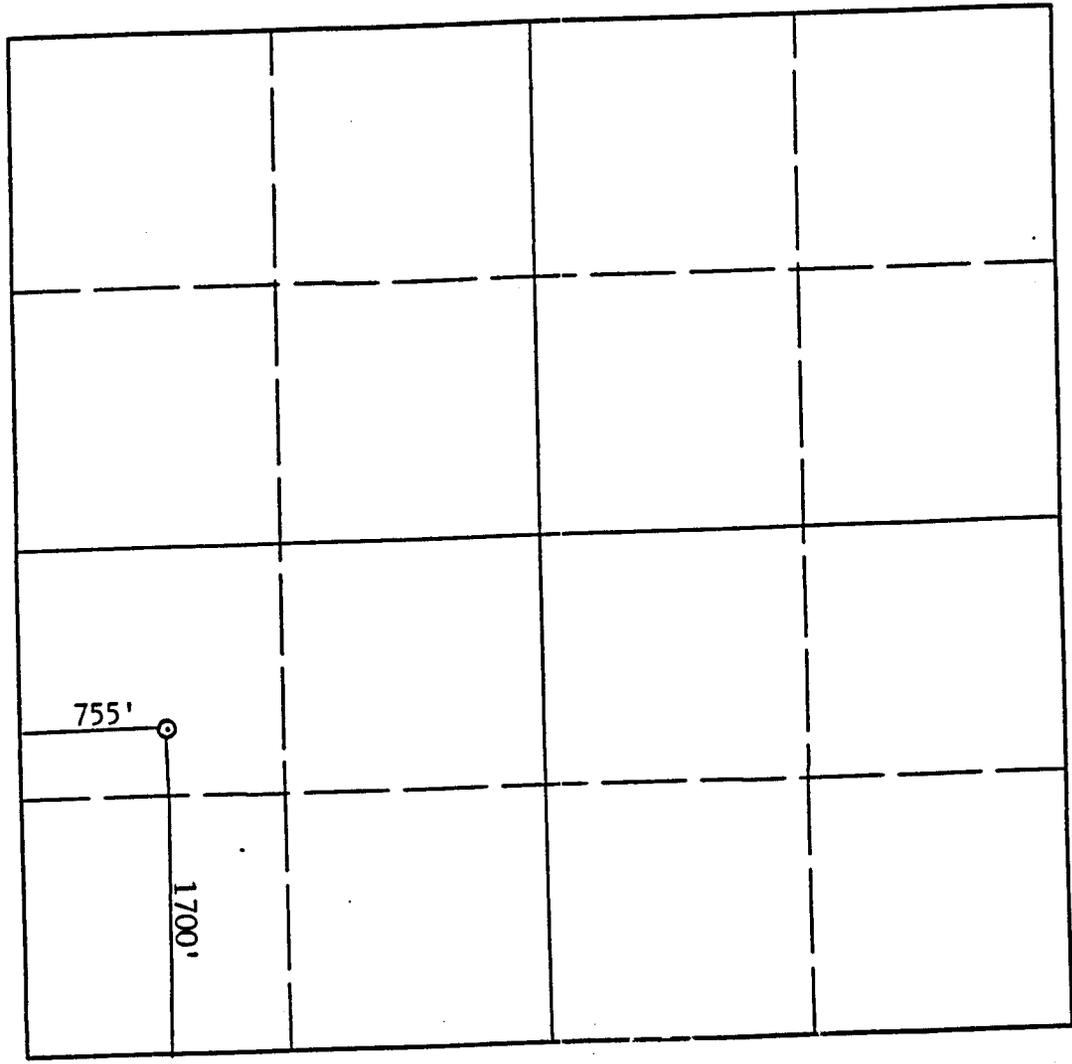
Company UNOCAL

Well Name & No. LISBON UNIT A 712

Location 1700 F/SL & 755 F/WL S.L.M.

Sec. 12 . T 30 S R 24 E S.L.M. County SAN JUAN CO. Utah

Ground Elevation 6450



Scale: 1" = 1000'

Surveyed April 5 . 19 95

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

Cecil Ebersole
 Registered Land Surveyor
 New Mexico Reg. No. 9672
 Non-Resident Professional
 Authorized by Utah State Law
 58 - 22 - 21 (b)

JUN 1995
 Received
 BLM
 Moab District

Union Oil Company of California
Well No. A-712
Lease U-06922
Lisbon Unit
NW/SW Section 12, T30S, R24E
San Juan County, Utah

CONDITIONS OF APPROVAL

Approval of this application 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.

Be advised that Union Oil Company of California is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by CA 0048 (Principal - Union Oil Company of California) via surety consent as provided for in 43 CFR § 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR § 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of one year from the date of approval. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR § 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to field representatives to insure compliance.

A. DRILLING PROGRAM

1. An annular preventer (not shown on the BOP diagram) shall be used.
2. A valve shall be installed on the choke manifold gauge stand, below the gauge. This way, in case of gauge failure, the gauge can be replaced without compromising the manifold.

C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

Building Location- Contact the Resource Area, Natural Resource Protection Specialist at least 48 hours prior to commencing construction of location.

Spud- The spud date will be reported to the Resource Area Office 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within 24 hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

Daily Drilling Reports- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the District Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with MMS.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR § 3162.3-2. Safe drilling and operating practices must be observed.

Drilling Suspensions- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Authorized Officer. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

Undesirable Events- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the Resource Area in accordance with requirements of NTL-3A.

Cultural Resources- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Area Manager is to be notified.

First Production- Should the well be successfully completed for production, the District Office will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five (5) business days following the date on which the well is placed into production.

A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the Resource Area Office. The Resource Area Office shall be notified prior to the first sale.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR § 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the District Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomic is granted. In such case, compensation to the lessor shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

Produced Water- Produced waste water may be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted to the District Office for approval pursuant to Onshore Oil and Gas Order No. 7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the District Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the District Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Office within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR § 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

B. SURFACE USE PLAN

1. In order to protect big game winter range, there will be no drilling operations from December 1 through April 15. The limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation may be specified in writing by the authorized officer.
2. Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed must be approved by the Area Manager prior to initiating the new surface disturbance.
3. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.6. When the well is abandoned, the abandonment marker must be at least four feet above restored ground level and must be inscribed with the following: operator name, lease number, well name and surveyed description (township, range, section and either quarter-quarter or footages).
4. The access road will be rehabilitated or brought to Resource (Class III) Road Standards within sixty (60) days of dismantling the drilling rig. If upgraded, the road must be maintained at these standards until the well is properly abandoned. If this time frame cannot be met, the Area Manager will be notified so that temporary drainage control can be installed along the access road.
5. In the event the well pad or road is graveled or surfaced, the material will be removed prior to recontouring the surface for rehabilitation.
6. The entire soil surface will be scarified with a 6 inch or less distance between the ripped surfaces. The soil surface will be dry and loose prior to seeding, and the scarified area will be left in a rough condition to retain moisture. The area will be broadcast seeded between October 1 and November 30 with the following mixture of pure live seed:

Crested wheatgrass	5 pounds/acre
Tall wheatgrass	3 pounds/acre
Indian ricegrass	4 pounds/acre
Fourwing saltbush	3 pounds/acre
Bitterbrush	3 pounds/acre
Yellow sweetclover	<u>1 pound/acre</u>
	19 pounds/acre

TABLE 1

NOTIFICATIONS

Notify Rich McClure at (810) 259-8193 for dirt work and reclamation; and notify Jeff Brown at (801) 587-2141 for the remaining actions:

2 days prior to commencement of dirt work, construction and reclamation;

1 day prior to spudding;

50 feet prior to reaching surface casing depth;

3 hours prior to testing BOPE

If the person at the above number cannot be reached, notify the Moab District Office at (801) 259-6111. If unsuccessful, contact the person listed below.

Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab District Office, Branch of Fluid Minerals at (801) 259-6111. If approval is needed after work hours, you may contact the following:

Eric Jones, Petroleum Engineer

Office: (801) 259-6111
Home: (801) 259-2214

Gary Torres, Petroleum Engineer

Office: (801) 587-2141
Home: (801) 587-2705



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

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

July 25, 1995

Union Oil Company of California
P. O. Box 2620
Casper, Wyoming 82602

Re: Lisbon Unit A-712 Well, 1700' FSL, 755' FWL, NW SW, Sec. 12, T. 30 S.,
R. 24 E., San Juan County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-037-31763.

Sincerely,

A handwritten signature in black ink, appearing to read "R. J. Firth".

R. J. Firth
Associate Director

ldc

Enclosures

cc: San Juan County Assessor
Bureau of Land Management, Moab District Office
WAPD



Operator: Union Oil Company of California

Well Name & Number: Lisbon Unit A-712

API Number: 43-037-31763

Lease: Federal U-06922

Location: NW SW Sec. 12 T. 30 S., R. 24 E.

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jimmie Thompson at (801)538-5340.

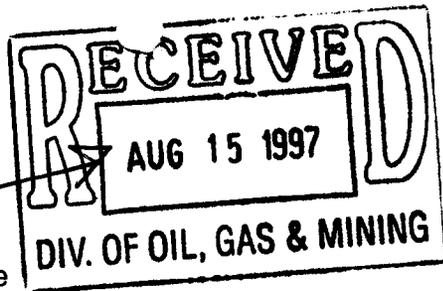
Notify the Division prior to commencing operations to plug and abandon the well. Contact Frank Matthews or Mike Hebertson at (801)538-5340.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

8/18/97

DOGm
LA
DATE
Moab District
82 East Dogwood Avenue
Moab, Utah 84532



3162
(UTU06922)
(UT-065)

Union Oil Company of California
P. O. Box 2620
Casper, Wyoming 82602

Re: **Rescinding** Application for Permit to Drill
Well No. Lisbon A-712
NWSW Sec. 12, T. 30 S., R. 24 E.
San Juan County, Utah
Lease UTU06922

43-037-31763
AUG 13 1997

Gentlemen:

The Application for Permit to Drill (APD) the referenced well was approved July 17, 1995, and later extended until July 17, 1997. The approval period has lapsed, and the well has not been drilled; therefore, we are rescinding approval of the referenced APD.

Although the well was not drilled, the well location was constructed. The location must now be reclaimed in accordance with the APD. If you should have questions regarding reclamation requirements, please call Rich McClure at (801) 259-2127.

If you intend to drill this location at a later date, a new APD must be submitted.

If you have any questions and/or concerns, please call Verlene Butts at (801) 259-2152.

Sincerely,

/s/ Brad D Palmer

Assistant District Manager
Resource Management

Enclosure
Application for Permit to Drill (35pp)

cc: State of Utah
Division of Oil, Gas, and Mining
1594 West North Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801 (w/o Enclosure)

VButts:vb:8/12/97