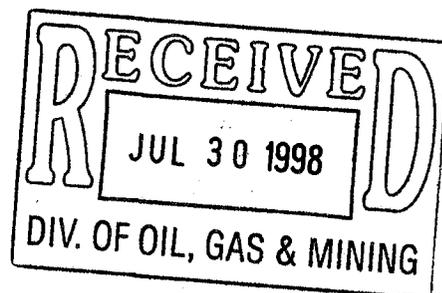


Memorandum



July 27, 1998

To: BLM Utah

From: Mike Phillips

Re: APD Lisbon Unit A-712
Re-submittal of Expired APD

Please find attached the updated APD for the Lisbon Unit A-712. The well was issued an approved APD previously but has expired. The location was built for the project but was not drilled due to a re-organization within our company and unfavorable economic conditions at the time.

I have updated the names and procedures as per our new organization. If you have any questions or need any additional information, please call me at 915-685-7608.

Regards,

A handwritten signature in cursive script that reads "Micheal C. Phillips".

Micheal C. Phillips
Permian Rocky Mountain Drilling Foreman

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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
 UNION OIL COMPANY OF CALIFORNIA

3. ADDRESS OF OPERATOR
 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 *FSL 755'* 1700' RWL & 755' FWL (NW SW)
 At proposed prod. zone *172'* 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. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
LISBON UNIT

8. FARM OR LEASE NAME
A-712

9. WELL NO.

10. FIELD AND POOL, OR WILDCAT
MISSISSIPPI (LEADVILLE)

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA
Sec. 12, T30S-R24E

12. COUNTY OR PARISH San Juan

13. STATE Utah

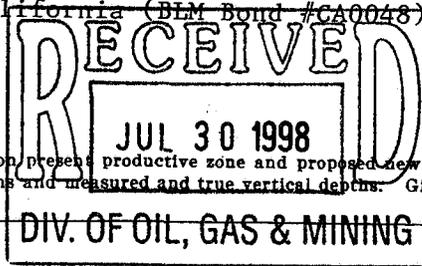
PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	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	7-1/2	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 with 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" tubing.

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 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. SIGNED Mike Phillips TITLE Drilling/Workover Foreman DATE 5/28/98

(This space for Federal or State office use)

PERMIT NO. 43-037-31790 APPROVAL DATE _____

APPROVED BY Bradley Hill TITLE BRADLEY G. HILL RECLAMATION SPECIALIST III DATE 8/10/98

Federal Approval of this Action is Necessary

*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

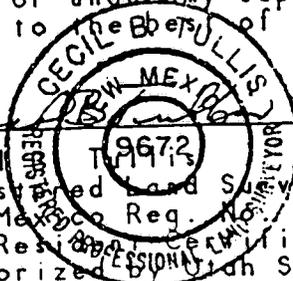
Ground Elevation 6450



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 Eberts
Registered Land Surveyor
New Mexico Reg. No. 9672
Non-Resident Certification as
Authorized by Utah State Law
58 - 22 - 21 (b)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

Memorandum

To: Assistant District Manager Minerals, Moab District
From: Michael Coulthard, Petroleum Engineer
Subject: 1998 Plan of Development Lisbon Unit San Juan
County, Utah.

Pursuant to email between Lisha Cordova, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management. The following well is planned for calendar year 1998 within the Lisbon Unit, San Juan County, Utah.

API #	WELL NAME	LOCATION
43-037-31790	LISBON UNIT A-712	Surface 1700-FSL-0755-FWL 12 30S 24E
		Bottom Hole 1500-FSL-0400-FWL

This office has no objection to permitting the well at this time.

/s/ Michael L. Coulthard

bcc: File - Lisbon Unit
Division of Oil Gas and Mining
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:--

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 4-1/2" 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 sx "lite" cement (mixed @ 12.5 lb./gal, yield 1.85 cu. Ft. / sx) containing 2% CaCl₂ and ¼ lb. / sx Flocele followed by 200 sx "G" cmt (mixed @ 15.6 lb. / gal, yield 1.19 cu. Ft. / sx) containing 2% CaCl₂ and ¼ lb. / sx Flocele.

The 5-1/2" 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 sx "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 sx 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 collare, centralized shoe joint and next five joints. Casing hardware for the production string to include guide shoe, float collare, "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 circulation 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.

<u>Duration of Operations:</u>	Drilling	- 40 days
	Completion	- 15 days

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. A dike sufficient to hold 1-1/2 times the capacity of the storage tanks will surround the tank battery.
 - 6) All site security regulations will be adhered to.
- c. Plan for rehabilitation of disturbed area 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 area.

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 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 faunas.

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:

Michael Phillips
Drilling / Workover Foreman
P.O. Box 671
Midland TX 79702

Phone (915) 685-7608

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.

Date

Drilling Foreman

H₂S CONTINGENCY PLAN

Company Name:	Union Oil Co. of Calif.	Date:	5-21-98
Address:	P.O. Box 2620 Casper WY 82602		
Well Name:	Lisbon Unit A-712	T.D.:	8805'
Location:	1700' FSL & 755' FWL Sec 12, T305 R24E		
Field Name:	Lisbon Valley		
H ₂ S Formation:	Mississippi Leadville (Redwall)	Depth:	8215'

Operations Superintendent:

Name: Bobby Searcy Office Ph: 915-685-6860 Home Ph: 915-684-7256

Company Man:

Name: Michael Phillips Office Ph: 915-685-7608 Home Ph: 915-697-2862

Geologist:

Name: Joe Schwab Office Ph: 915-685-6830 Home Ph:

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 901-259-7191
Monticello UT 801-587-2096
St. Mary's Helicopter 800-525-4224
2. Hospital (s): Moab, UT 901-259-7191 or 801-259-7192
Monticello UT 901-587-2116
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.

EMERGENCY PHONE LIST (CONTINUED):

D. Service Companies:

1. Pump Trucks: Halliburton Energy Services
Farmington, NM 505-325-3575

Dowell Schlumberger Farmington, NM
505-325-5096
2. Dirt Contractor (s):
Knut & Sons Moab UT 801-259-6274

Sutherland Bros. Inc. Nucla CO 970-864-7662
Monticello UT 801-587-2019
3. Roustabout Crew (s):
Knut & Sons Moab UT 801-259-6274
4. H₂S Service Company:
Standby Safety Services Cortez CO
970-565-6391
5. Others: Lisbon Valley Plant 801-686-2236

Note: All entries should be made in the following manner:

Name – Phone – Location

I. INTRODUCTION. H₂S is a toxic, poisonous gas that could cause death or injury. The objective of this contingency plan is to 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 is 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 any 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's & 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 windsocks or streamers. The wind direction indicators for this well will be located at: (to be determined and filled in after setting rig & 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 & 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, 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.

B. 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 evacuated 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.

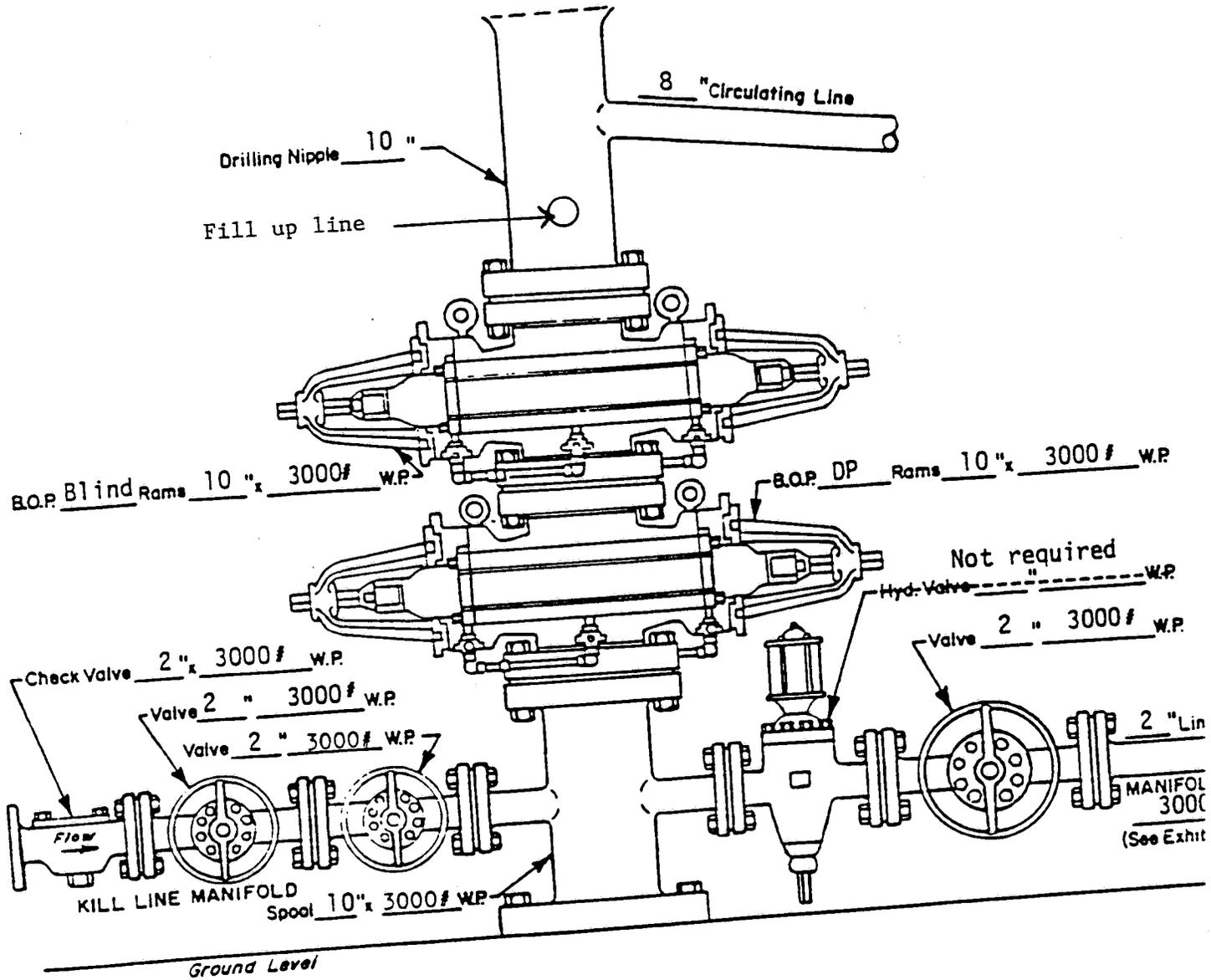
C. Service Company Personnel. All service personnel shall have been trained by their employers in the hazards and characteristics of H₂S and the operation of safety equipment and life support systems.

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:

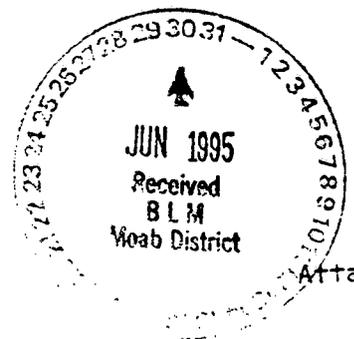
1. Hazards and characteristics of hydrogen sulfide. It is an extremely dangerous gas. It is normally detectable by its "rotten-egg" odor, but odor is not a reliable means of detection because the sense of smell may be dulled or lost due to intake of the gas. It is colorless, transparent, and flammable. It is heavier than air and may accumulate in low places.
2. The necessity of an emergency 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 or 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.

LISBON UNIT A-712
 San Juan Co., Utah

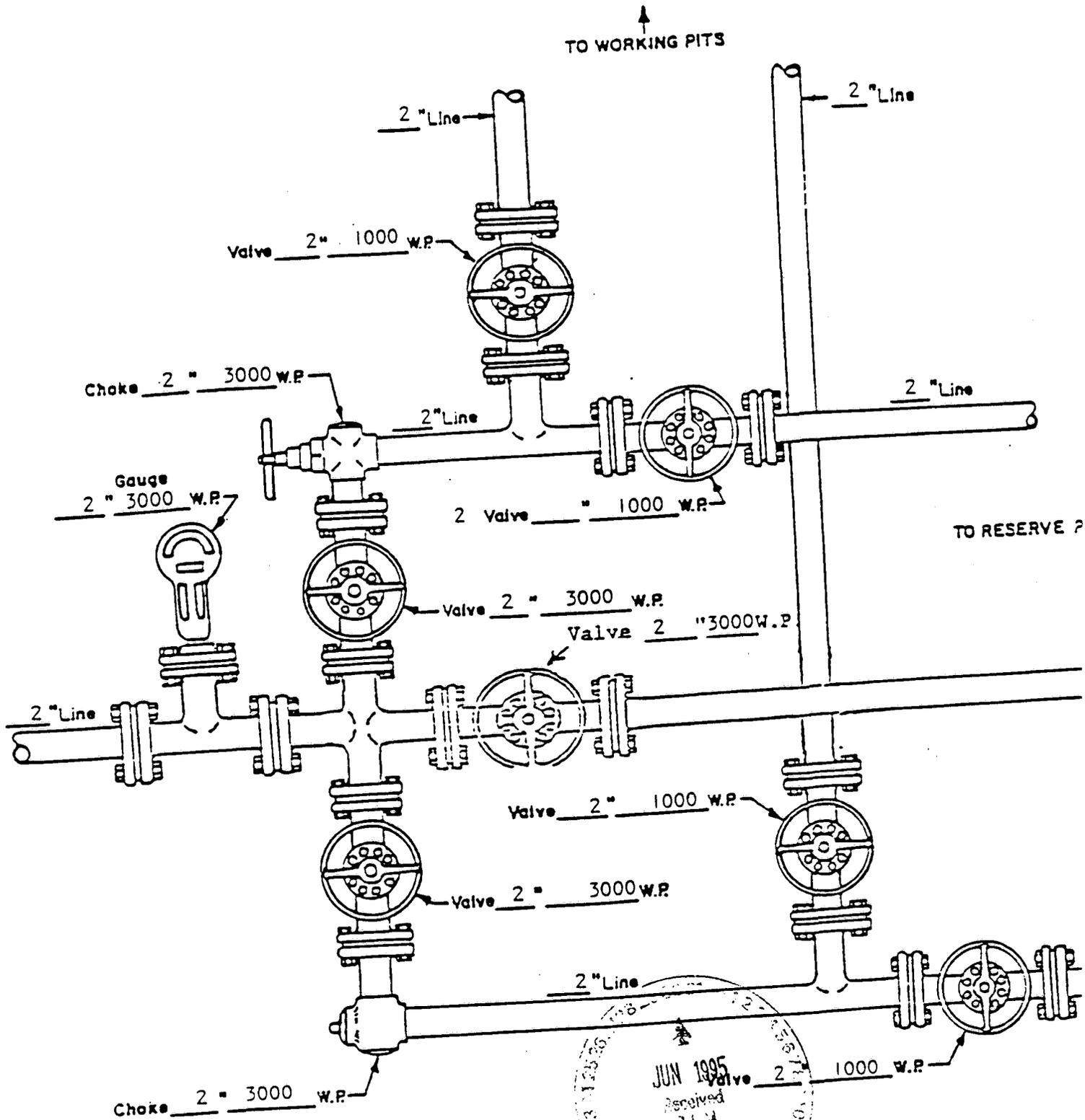


WELL HEAD B.O.P.
 3000 #W.P.

- Manual
- Hydraulic



LISBON UNIT A-712
San Juan Co., Utah

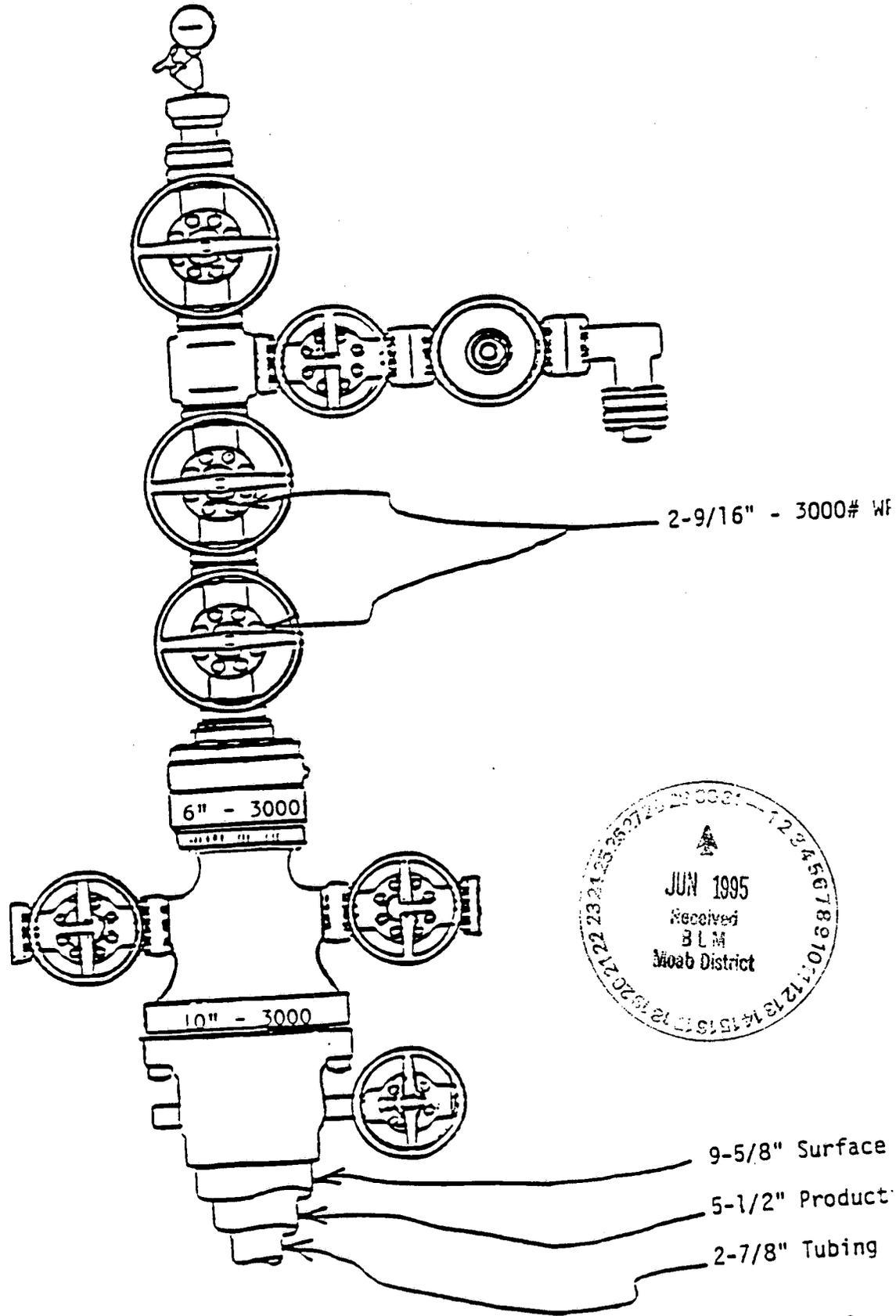


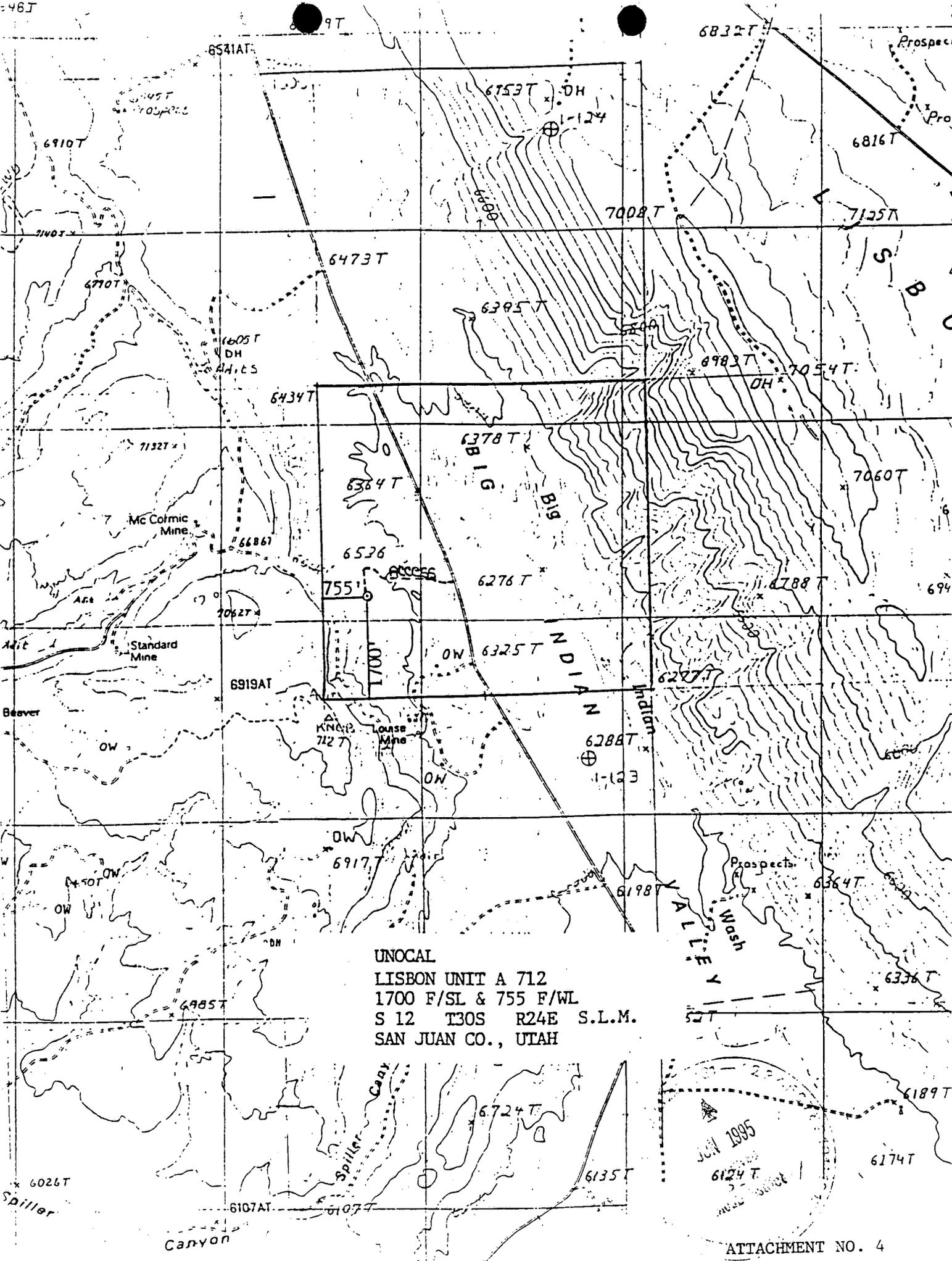
JUN 1995
Received
B L W
Insub District

MANIFOLD
3000 #W.P.

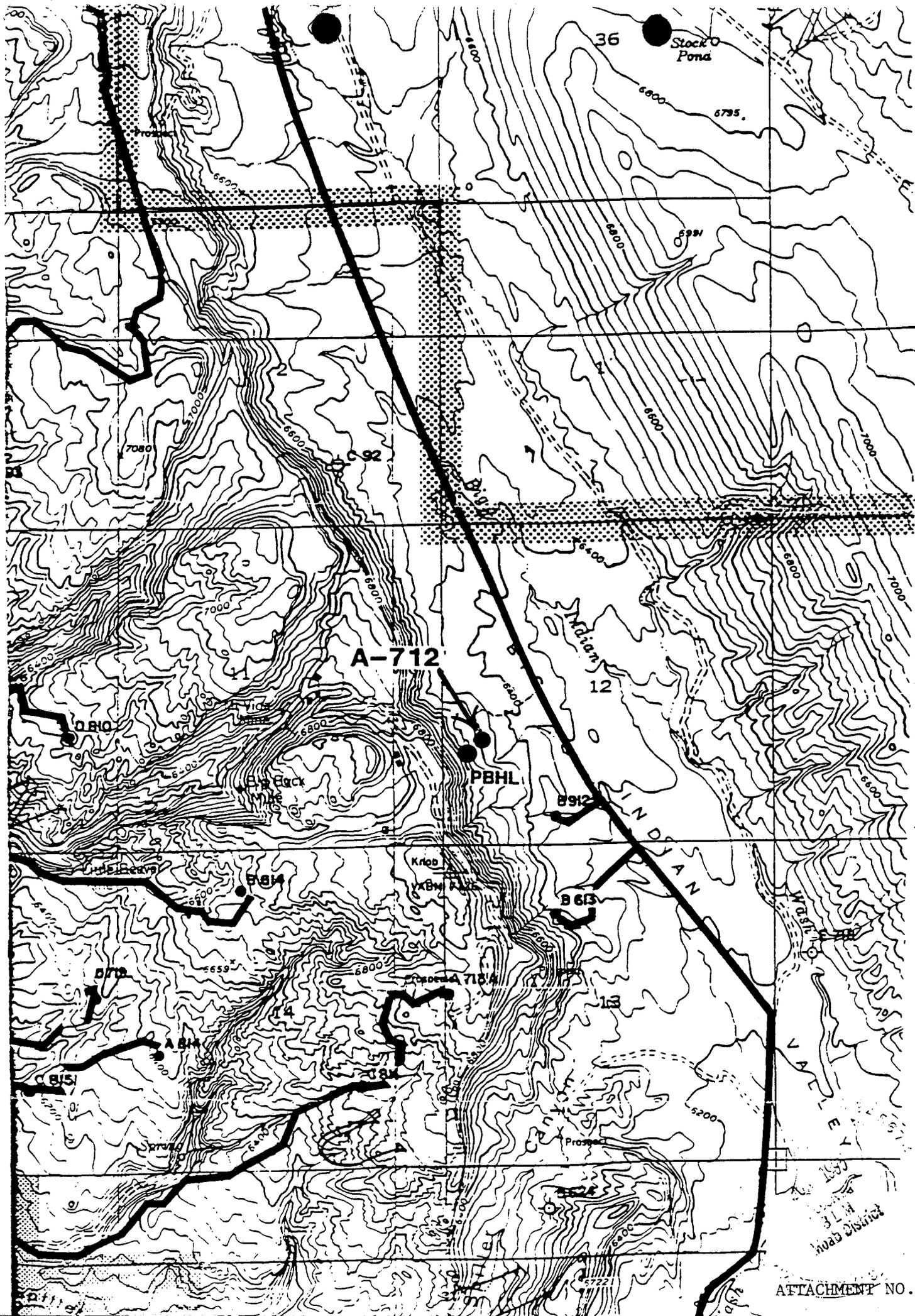
- Manual
- Hydraulic

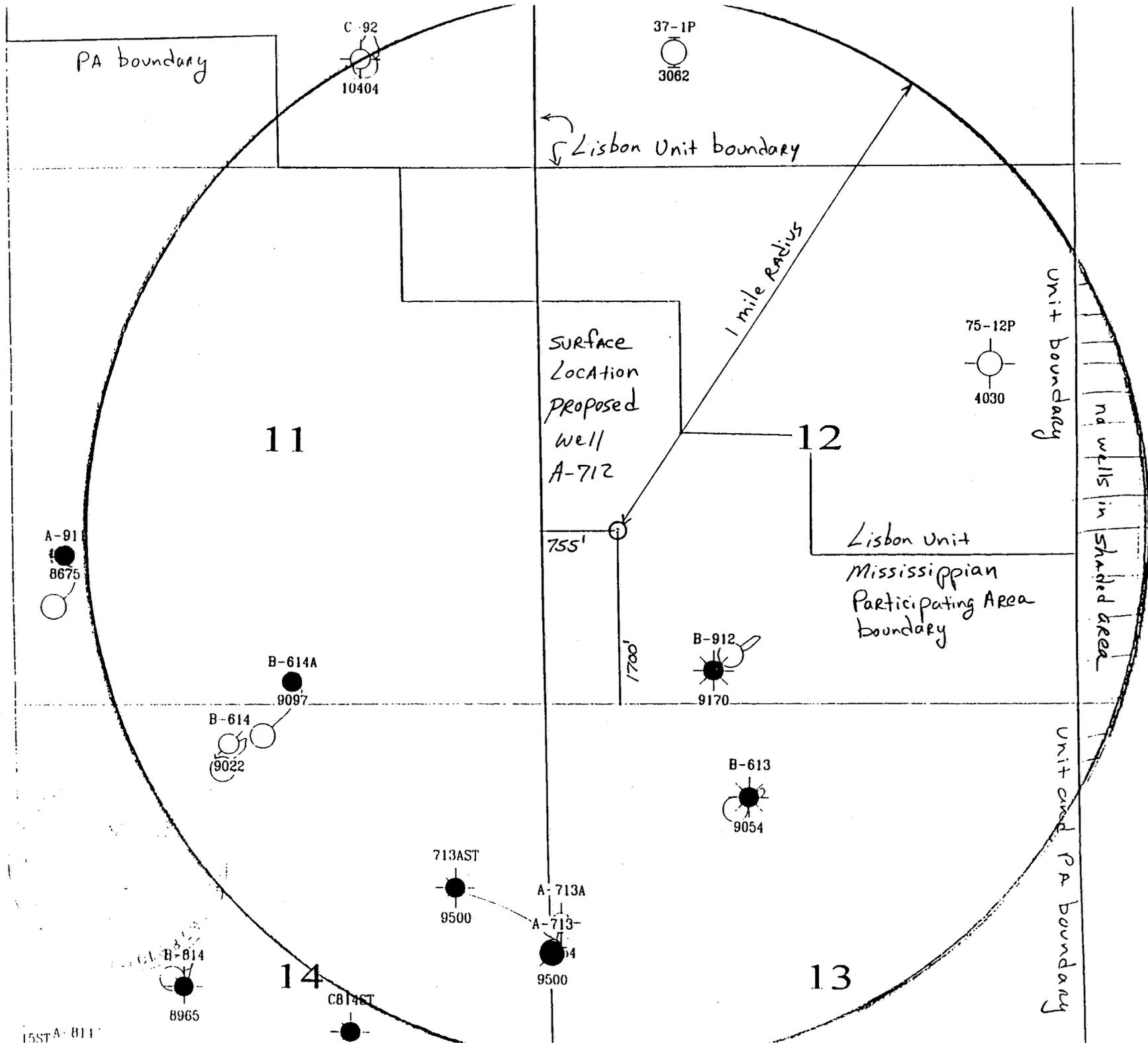
LISBON UNIT A-712
San Juan Co., Utah

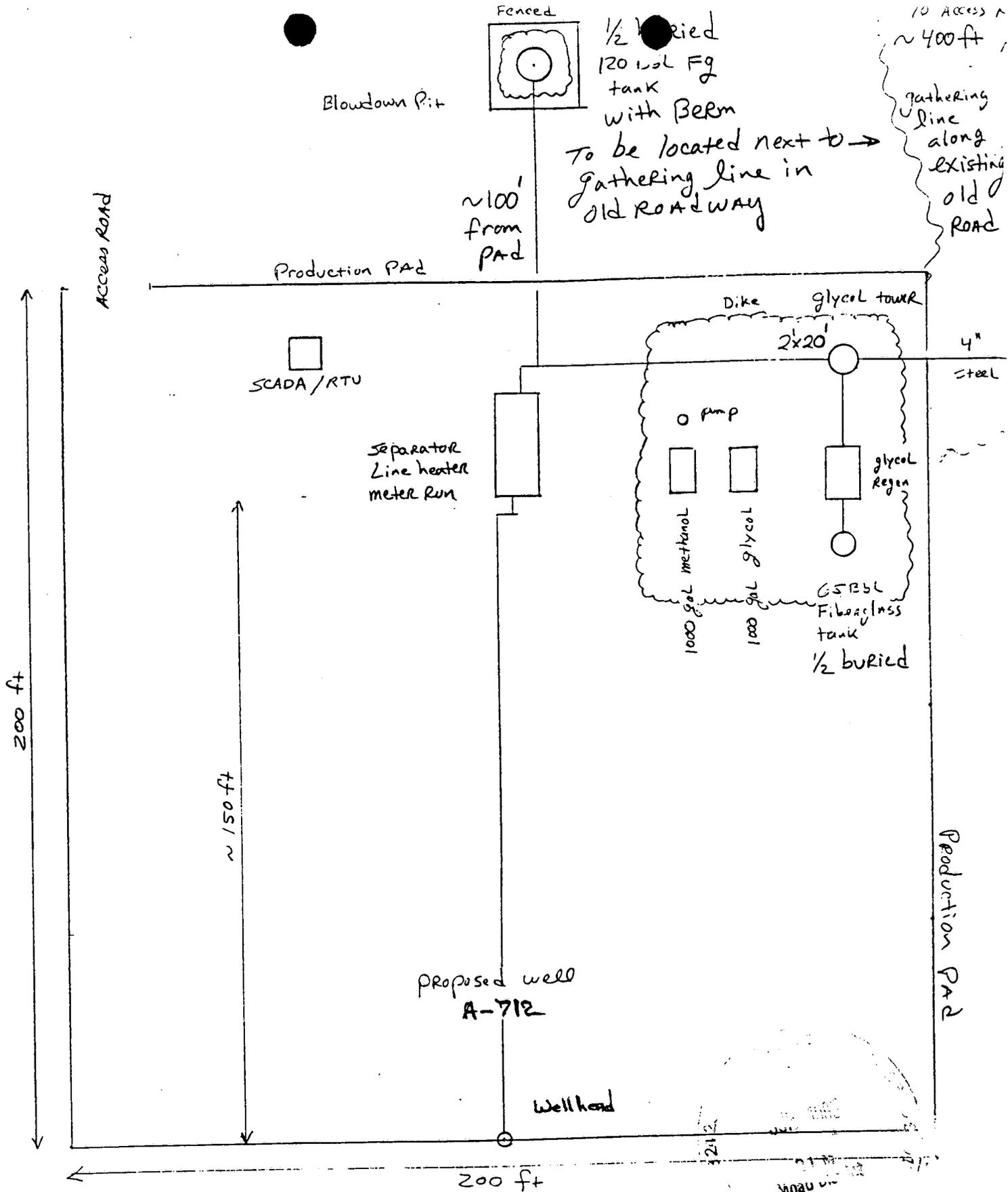




UNOCAL
 LISBON UNIT A 712
 1700 F/SL & 755 F/WL
 S 12 T30S R24E S.L.M.
 SAN JUAN CO., UTAH







ATTACHMENT NO. 7

Proposed well A-712 Lisbon Uni		
SCALE:	APPROVED BY:	DRAWN BY S
DATE: 5-18-95		REVISED
wellsite production equipment		
DRAWING NO:		

Big Indian Pipeline

bury all way follow access road
4" Gathering Line

Well A-712
Proposed well
Surface location

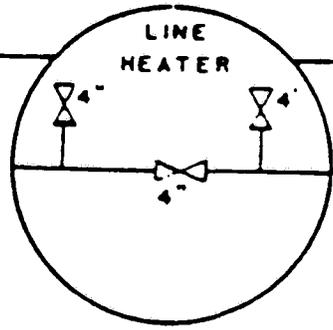
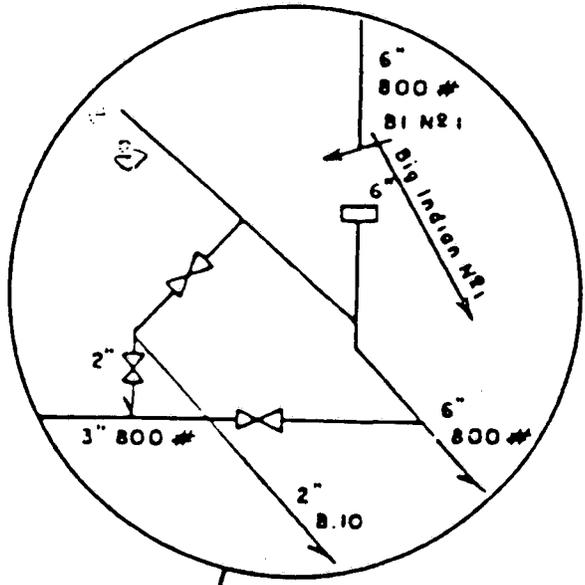
B-912

B-613

A-713A

12

tie into Big Indian gathering Line



tie into 6" main gathering line to Lisbon plant

4" 1800'

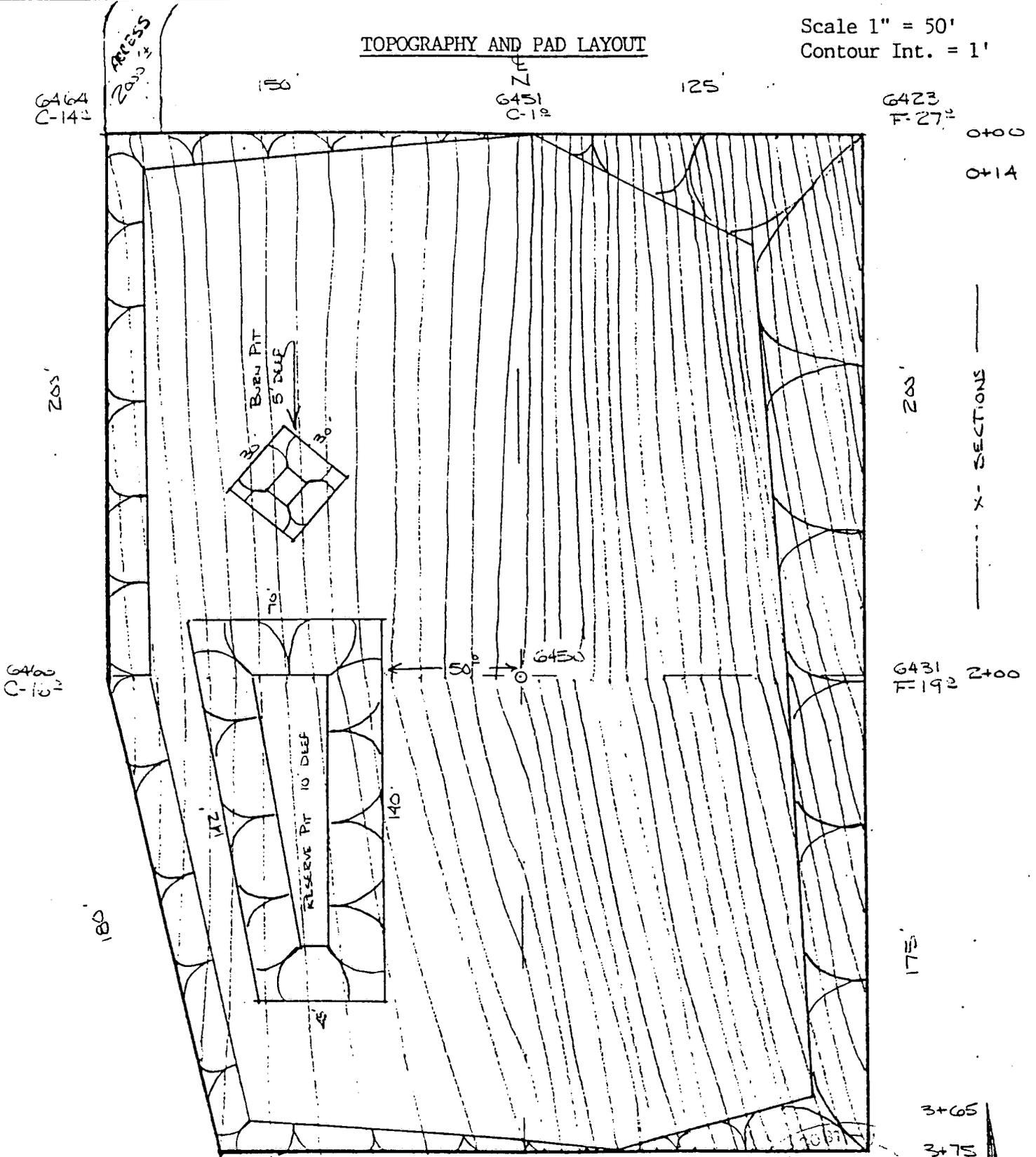
3" 1065'

Shut in 3000' - 2 1/8" HYDRIL TUBING

Shut in 6" Gathering Line to Lisbon
3" 4490'

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

Scale: Horz. 1" = 5
Vert. 1" = 1

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

ZERO CUT / FILL

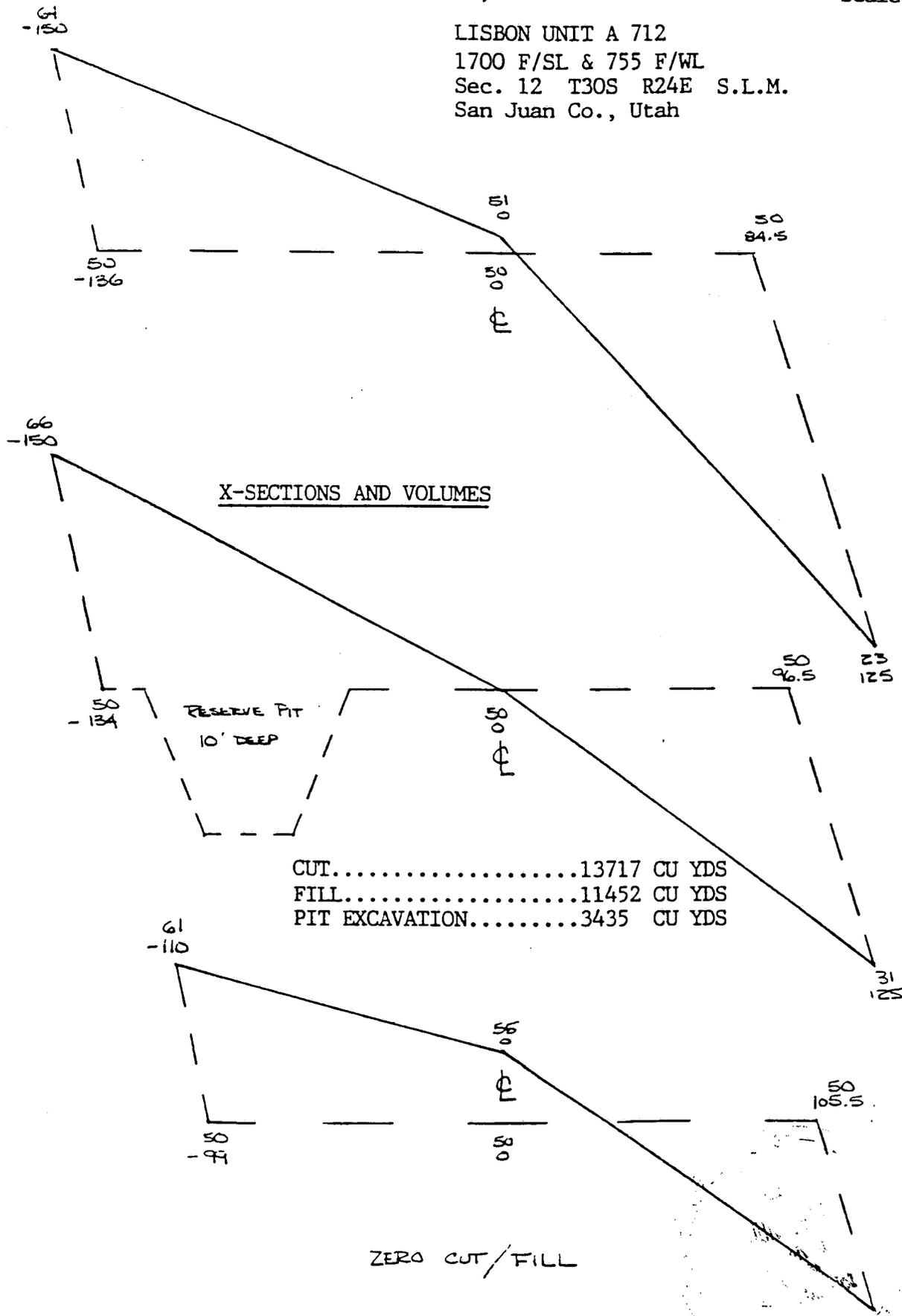
0+00

0+14

2+00

3+65

3+75

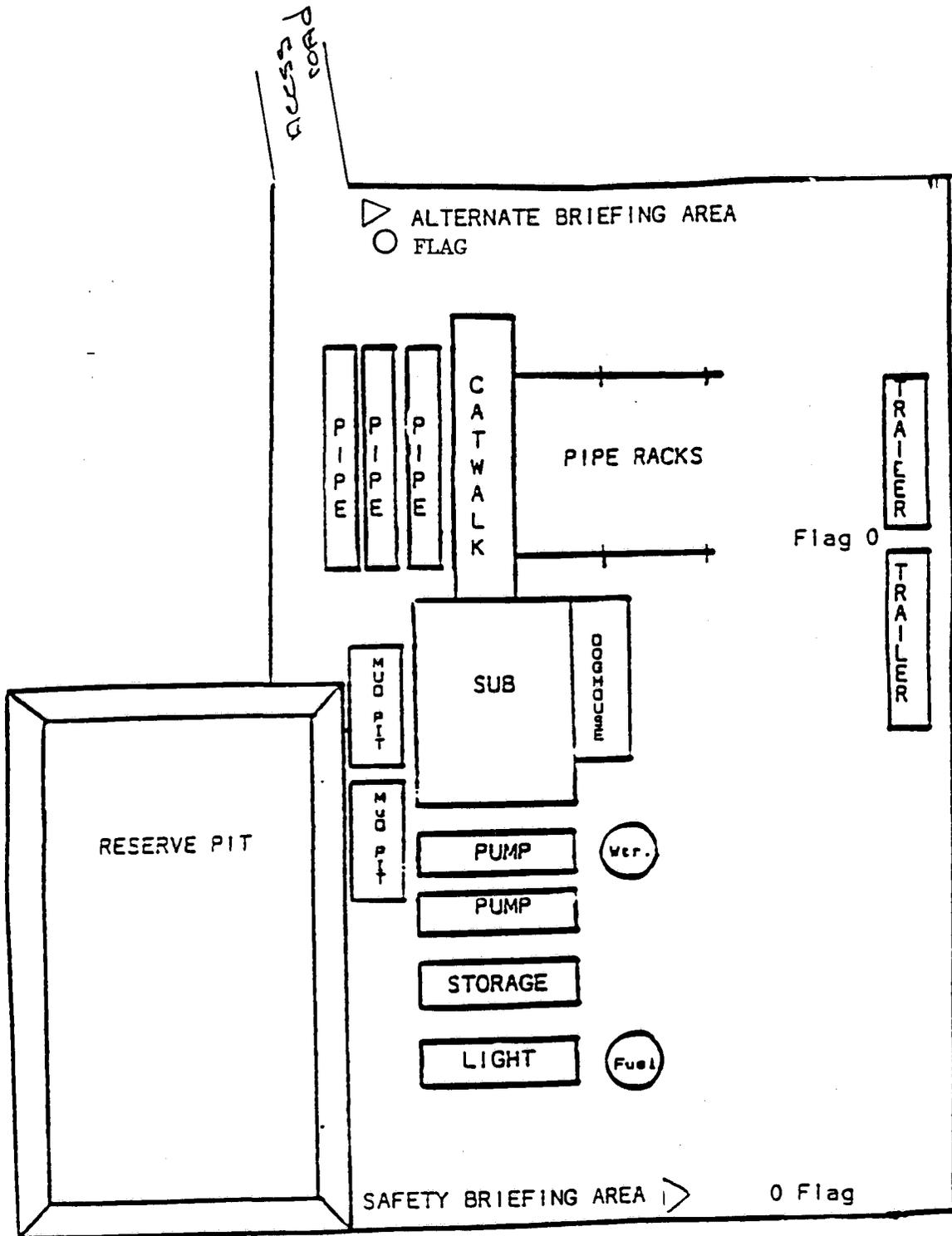


X-SECTIONS AND VOLUMES

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

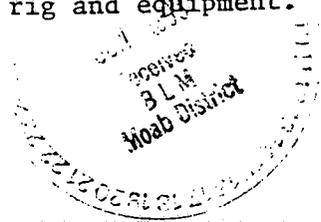
NOTE: CUTS @ 1.0 to 1
FILLS @ 1.5 to 1

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: 07/30/98

API NO. ASSIGNED: 43-037-31790

WELL NAME: LISBON UNIT A-712
 OPERATOR: UNION OIL COMPANY OF CA (N1030)
 CONTACT: Mike Phillips (915) 685-7608

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

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

LEASE TYPE: FED
 LEASE NUMBER: U-06922
 SURFACE OWNER: Federal

PROPOSED FORMATION: MSSP

RECEIVED AND/OR REVIEWED:

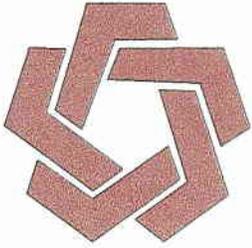
Plat
 Bond: Federal State Fee
 (No. CAC048)
 Potash (Y/N)
 Oil Shale (Y/N) *190-5(B)
 Water Permit
 (No. 838-05-570)
 RDCC Review (Y/N)
 (Date: _____)
N/A St/Fee Surf Agreement (Y/N)

LOCATION AND SITING:

R649-2-3. Unit Lisbon
 R649-3-2. General
 R649-3-3. Exception
 Drilling Unit
 Board Cause No: _____
 Date: _____

COMMENTS: *Orig. APD 43-037-31763 LA'd 8-15-97.
*Not listed in Lisbon Unit P.O.D. 1998. (BLM added 8-5-98)

STIPULATIONS: ① UNION OIL COMPANY OF CALIFORNIA MUST COMPLY WITH THE RULES FOR DRILLING IN A "DESIGNATED POTASH AREA" AS STATED IN R649-3-28 OF THE UTAH OIL AND GAS RULES. (PROVIDE A COPY)
 ② FEDERAL APPROVAL



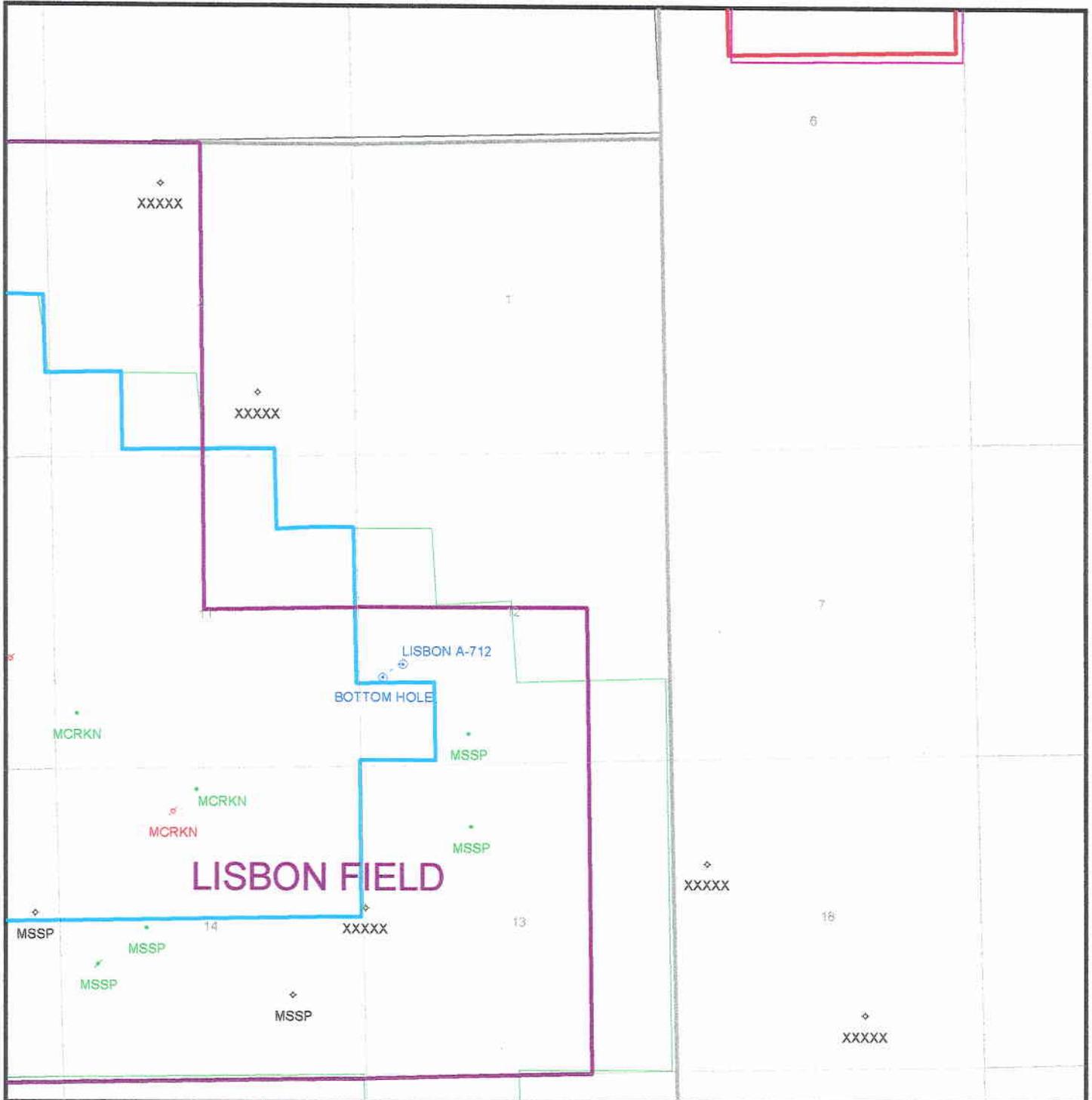
DIVISION OF OIL, GAS & MINING

OPERATOR: UNION OIL OF CALIFORNIA (N1030)

FIELD: LISBON FIELD (385)

SEC. 12, TWP 30S, RNG 25E

COUNTY: SAN JUAN UAC: R649-2-3 LISBON UNIT



DATE PREPARED:
31-JULY-1998



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
801-359-3940 (Fax)
801-538-7223 (TDD)

Michael O. Leavitt
Governor
Lowell P. Braxton
Division Director

August 10, 1998

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 43-037-31790.

Sincerely,

A handwritten signature in cursive script, appearing to read "John R. Baza".

for John R. Baza
Associate Director

lwp

Enclosures

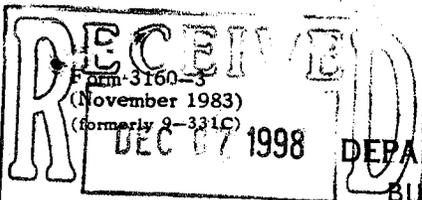
cc: San Juan County Assessor
Bureau of Land Management, Moab District Office

Operator: Union Oil Company of California
Well Name & Number: Lisbon Unit A-712
API Number: 43-037-31790
Lease: 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 prior to spudding the well. Contact Jim Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or Robert Krueger at (801) 538-5274.
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.
4. Union Oil Company of California must comply with the rules for drilling in a "Designated Potash Area" as stated in R649-3-28 of the Utah Oil and Gas Rules (copy attached).
5. State approval of this well does not supersede the required federal approval which must be obtained prior to drilling.



SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved. Budget Bureau No. 1004-0136 Expires August 31, 1985

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

DIV. OF OIL GAS AND MINING 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

UNION OIL COMPANY OF CALIFORNIA

3. ADDRESS OF OPERATOR

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 FSL 755 VS 8/4/98 1700' RWL & 8 7/8" 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.

220'

(Also to nearest drig. 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*

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	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	7-1/2	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 with 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" tubing.

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 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.

SIGNED

Mike Phillips

TITLE

Drilling/Workover Foreman

DATE

5/28/98

(This space for Federal or State office use)

PERMIT NO.

/S/ WILLIAM C. STRINGER

Assistant Field Manager, Division of Resources

APPROVED BY

TITLE

DATE

DEC - 3 1998

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED

*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.

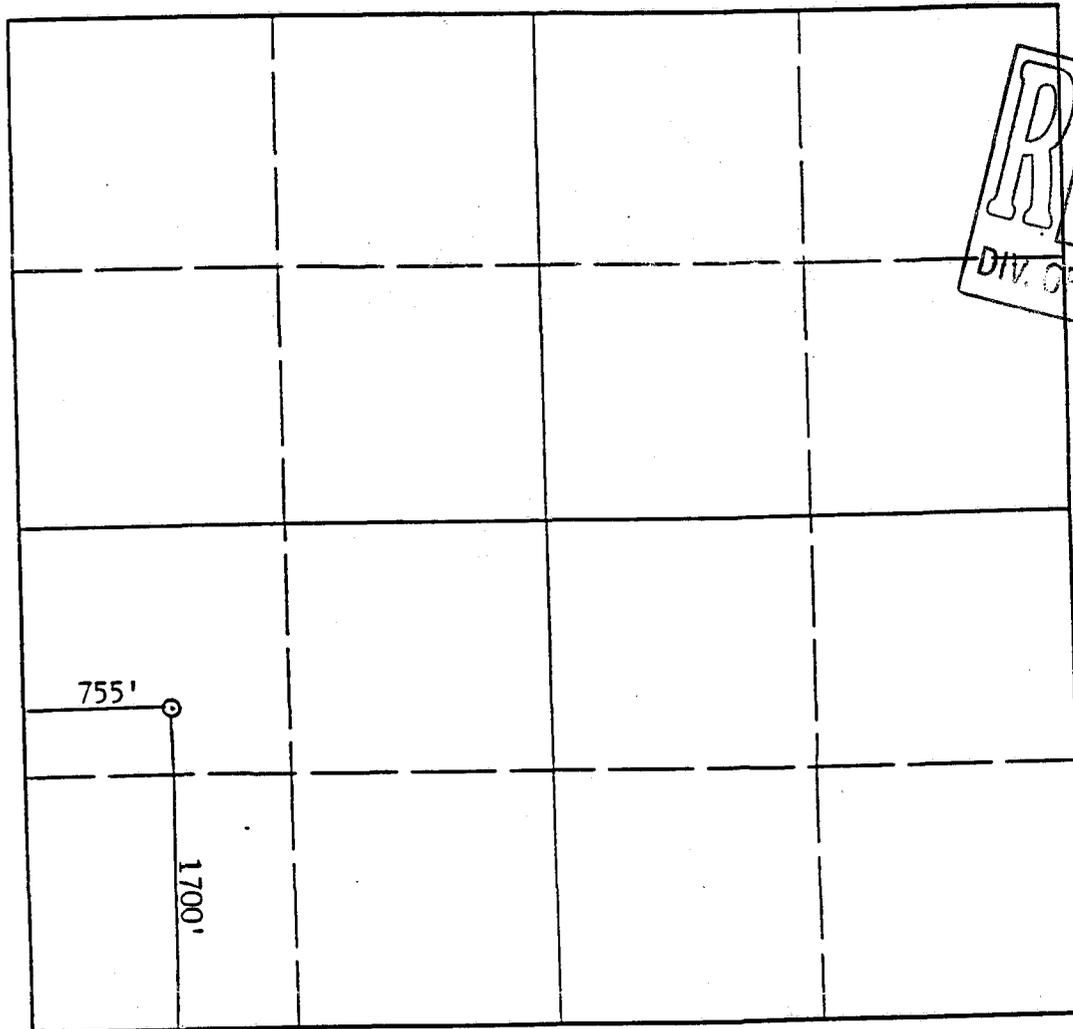
Company UNOCAL

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



RECEIVED
DEC 07 1998
DIV. OF OIL, GAS & MINING

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
Non-Resident Professional as
Authorized by State Law
58 - 22 - 21 (b)

UNION OIL OF CALIFORNIA
Lisbon Unit A-712
Lease U-06922
NWSW Section 12, T. 30 S., R. 24 E.
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 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 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. The BOP system shall be rated to 3M as proposed. Installation, testing and operation of the system shall be in conformance with Onshore Oil and Gas Order No. 2.
2. An annular preventer shall be used.
3. 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.
4. Any fluid bearing zones or lost circulation zones encountered while drilling will be isolated behind casing and cement.

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 authorized officer 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 authorized officer 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

C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, enclosed.

Building Location- Contact the BLM Petroleum Engineering Technician at the Monticello Field Office at least 48 hours prior to commencing construction of location.

Spud- The spud date will be reported to BLM 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the Moab Field 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 Moab Field 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 Moab Field Office. 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 BLM 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 BLM is to be notified.

First Production- Should the well be successfully completed for production, the Moab Field 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 Monticello Field Office. The Monticello Field 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 Moab Field 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 Moab Field 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 occurs first, without the prior, written approval of the BLM. 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 Moab Field Office for approval pursuant to Onshore Oil and Gas Order No. 7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the Moab Field 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 Moab Field Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) shall be filed with the Moab Field 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 BLM, or the appropriate surface managing agency.

TABLE 1. NOTIFICATIONS

Notify Jeff Brown of the Monticello BLM Field Office in Monticello, Utah, at (435) 587-1525, or at home (435) 587-2046 for the following:

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

1 day prior to spudding;

50 feet prior to reaching each casing setting depth;

3 hours prior to testing BOPE

If the person at the above number cannot be reached, notify the Moab Field Office at (435) 259-2100. If unsuccessful, contact one of the people 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 Field Office at (435) 259-6111. If approval is needed after work hours, you may contact the following:

Gary Torres, Petroleum Engineer	Office:	(435) 587-1524
	Home:	(435) 587-2705

Eric Jones, Petroleum Engineer	Office:	(435) 259-2117
	Home:	(435) 259-2214



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

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

April 12, 2001

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

Re: APD Rescinded – Lisbon Unit A-712, Sec.12, T.30S, R.24E – San Juan County, Utah, API No. 43-037-31790

Dear Mr. Phillips:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on August 10, 1998. No drilling activity at this location has been reported to the division. Due to the excessive time delay in commencing drilling operations, approval to drill the well is hereby rescinded, effective August 10, 2000.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

A handwritten signature in cursive script that reads "Lisha Cordova".

Lisha Cordova
Eng. Technician

cc: Well File
Bureau of Land Management, Moab