

UTAH OIL AND GAS CONSERVATION COMMISSION

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

DATE FILED OCTOBER 7, 1996

LAND FEE & PATENTED STATE LEASE NO PUBLIC LEASE NO U-74869 INDIAN

DRILLING APPROVED: MARCH 18, 1997

SPOUDED IN: 7/3/97

COMPLETED: 8/11/97 POW PUT TO PRODUCING:

INITIAL PRODUCTION: 61 Bbl, 133 mcf, 7 Bbl

GRAVITY A.P.I. GOR 2.2

PRODUCING ZONES: 4964 - 5974' GRV

TOTAL DEPTH: 6075'

WELL ELEVATION: 5283' GR

DATE ABANDONED

FIELD MONUMENT BUTTE

UNIT

COUNTY: DUCHESNE

WELL NO: TAR SANDS FEDERAL 3-31 API NO. 43-013-31733

LOCATION: 711 FNL FT. FROM (N) (S) LINE: 1978 FWL FT. FROM (E) (W) LINE: NE NW 1/4 - 1/4 SEC 31

TWP	RGE	SEC	OPERATOR	TWP	RGE	SEC	OPERATOR
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				8S	17E	31	INLAND PRODUCTION
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QUATERNARY	Star Point	Chinle	Molas
Alluvium	Wahweap	Shinarump	Manning Canyon
Lake beds	Masuk	Moenkopi	Mississippian
Eocene	Colorado	Sinbad	Humburg
Lake beds	Sego	PERMIAN	Brazer
QUATERNARY	Buck Tongue	Kaibab	Pilot Shale
Oligocene	Castlegate	Coconino	Madison
Salt Lake	Mancos	Cutler	Leadville
Oligocene	Upper	Hoskinnini	Redwall
Forwood	Middle	DeChelly	DEVONIAN
Oligocene	Lower	White Rim	Upper
Yukon River	Emery	Organ Rock	Middle
Platina	Blue Gate	Cedar Mesa	Lower
Tridger	Ferron	Halgate Tongue	Ouray
Green River	Frontier	Phosphoria	Elbert
Garden gulch	Dakota	Park City	McCracken
Point 3	Burro Canyon	Rico (Goodridge)	Aneth
X marker	Cedar Mountain	Supai	Simonson Dolomite
Y marker	Buckhorn	Wolfcamp	Sevy Dolomite
Dick	JURASSIC	CARBON I FEROUS	North Point
Bicarbonate	Morrison	Pennsylvanian	SILURIAN
B limestone	Salt Wash	Oquirrh	Laketown Dolomite
Castle Peak	San Rafael Gr.	Weber	ORDOVICIAN
lagstaff	Summerville	Morgan	Eureka Quartzite
North Horn	Bluff Sandstone	Hermosa	Pogonip Limestone
Limy	Curtis		CAMBRIAN
Paleocene	Entrada	Pardox	Lynch
Current Creek	Moab Tongue	Ismay	Bowman
North Horn	Carmel	Desert Creek	Tapeats
CRETACEOUS	Glen Canyon Gr.	Akah	Ophir
Montana	Navajo	Barker Creek	Tintic
Mesaverde	Kayenta		PRE - CAMBRIAN
Price River	Wingate	Cane Creek	
Blackhawk	TRIASSIC		

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO. U-74869
6. IF INDIAN, ALLOTTEE OR TRIBE NAME

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL [X] DEEPEN [ ]
1b. TYPE OF WELL OIL GAS SINGLE MULTIPLE WELL [X] WELL [ ] OTHER [ ] ZONE [ ] ZONE [ ]

7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME Tar Sands Federal

2. NAME OF OPERATOR Inland Production Company

9. WELL NO. #3-31

3. ADDRESS OF OPERATOR P.O. Box 1446 Roosevelt, UT 84066 Phone: (801) 722-5103

10. FIELD AND POOL OR WILDCAT Monument Butte

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*) At Surface NE/NW At proposed Prod. Zone 711'FNL & 1978' FWL

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec.31,T8S,R17E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* 13.4 miles south of Myton,Utah

12. County Duchesne 13. STATE UT

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.(Also to nearest drlg. unit line, if any) 1978'

16. NO. OF ACRES IN LEASE 1968.01

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT. 1429'

19. PROPOSED DEPTH 6500'

20. ROTARY OR CABLE TOOLS Rotary

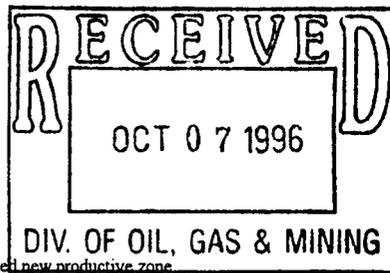
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5282.8'

22. APPROX. DATE WORK WILL START\* 4Th Quarter 1996

23. PROPOSED CASING AND CEMENTING PROGRAM

Table with 5 columns: SIZE OF HOLE, SIZE OF CASING, WEIGHT/FOOT, SETTING DEPTH, QUANTITY OF CEMENT. Rows include 12 1/4, 7 7/8 hole sizes and 24#, 15.5# weights.

The actual cement volumes will be calculated off of the open hole logs, plus 15% excess.



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 Brad Mechem [Signature] TITLE District Manager DATE 9/23/96

(This space for Federal or State office use)

PERMIT NO. 43-013-31733 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 [Signature] TITLE DATE 3/18/97.

\*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.

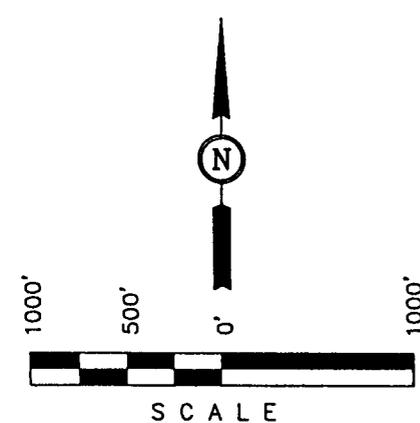
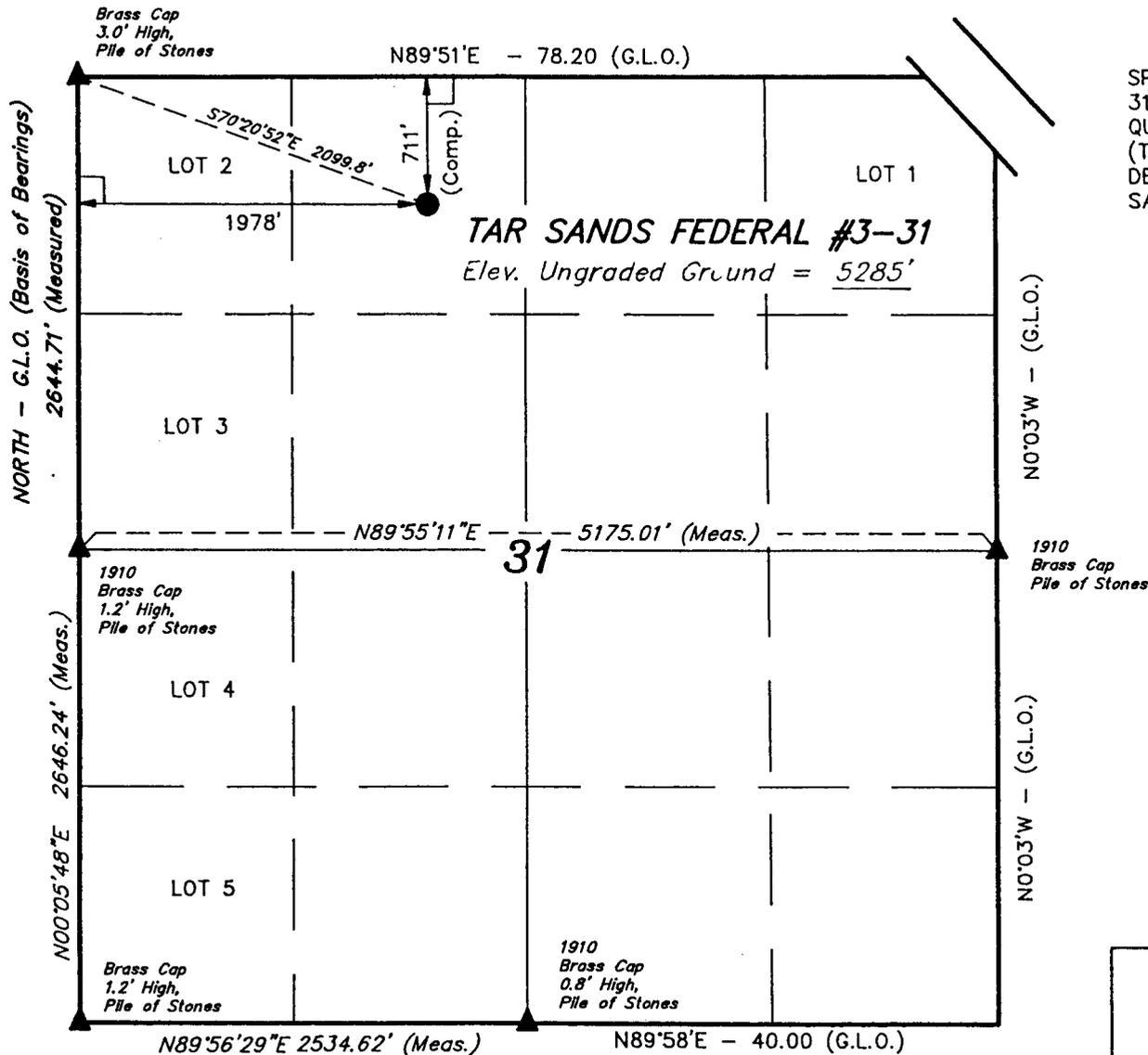
INLAND PRODUCTION CO.

**T8S, R17E, S.L.B.&M.**

Well location, TAR SANDS FEDERAL #3-31,  
located as shown in the NE 1/4 NW 1/4  
of Section 31, T8S, R17E, S.L.B.&M.  
Duchesne County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION  
31, T8S, R17E, S.L.B.&M. TAKEN FROM THE MYTON SE  
QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD.  
(TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES  
DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY.  
SAID ELEVATION IS MARKED AS BEING 5301 FEET.



CERTIFICATE

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.

*Robert L. Hay*

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

<b>UINTAH ENGINEERING &amp; LAND SURVEYING</b>		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(801) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 4-15-96	DATE DRAWN: 4-24-96
PARTY G.S. R.E. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE INLAND PRODUCTION CO.	

**INLAND PRODUCTION COMPANY  
TAR SANDS FEDERAL #3-31  
NE/NW SECTION 30, T8S, R17E  
DUCHESNE COUNTY, UTAH**

**TEN POINT WELL PROGRAM**

**1. GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

**2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Uinta	0' - 3030'
Green River	3030'
Wasatch	6500'

**3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation 3030' - 6500' Oil

**4. PROPOSED CASING PROGRAM**

8 5/8", J-55, 24# w/ ST&C collars; set at 300' KB (New)  
5 1/2" J-55, 15.5# w/ LT&C collars/ set at TD (New)

**5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

The operators minimum specifications for pressure control equipment are as follows:

A 8" Series 900 Annular Bag type BOP and a 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOPS's will be checked daily.

(See Exhibit F)

**6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

The well will be drilled with fresh water through the Uinta Formation. From the top of the Green River Formation @ 3050' ±, to TD, a fresh water/polymer system will be utilized. If necessary to control formation fluids, the system will be weighted with the addition of bentonite gel, and if conditions warrant, barite. Clay inhibition will be achieved with additions or by adding DAP (Di-Ammonium Phosphate, commonly known as fertilizer). Typically, this fresh water/polymer system will contain Total Dissolved Solids (TDS) of less than 3000 PPM. Neither potassium chloride or chromates will be utilized in the fluid system. The anticipated mud weight is 8.4 ppg and weighted as necessary for gas control.

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

8. **TESTING, LOGGING AND CORING PROGRAMS:**

No drill stem testing has been scheduled for this well. It is anticipated at this time that the logging will consist of a Dual Induction Laterolog, Gamma Ray/Caliber from TD to base of surface casing @ 300' ±, and a Compensated Neutron-Formation Density Log. Logs will run from TD to 3500' ±. The cement bond log will be run from PBTD to cement top. An automated mud logging system will be utilized while drilling to monitor and record penetration rate, and relative gas concentration, in the fluid system.

9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

The anticipated maximum bottom hole pressure is 1800 psi. It is not anticipated that abnormal temperatures will be encountered; nor that any other abnormal hazards such as H<sub>2</sub>S will be encountered in this area.

10. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

It is anticipated that the drilling operations will commence in the fourth quarter of 1996, and take approximately six days to drill.

**INLAND PRODUCTION COMPANY  
TAR SANDS FEDERAL #3-31  
NE/NW SECTION 31, T8S, R17E  
DUCHESNE COUNTY, UTAH**

**THIRTEEN POINT WELL PROGRAM**

**1. EXISTING ROADS**

See attached Topographic Map "A"

To reach Inland Production Company well location site Tar Sands Federal #3-31 located in the NE 1/4 NW 1/4 Section 31, T8S, R17E, S.L.B. 7 M. Duchesne County, Utah:

Proceed westerly out of Myton, Utah along Highway 40 - 1.5 miles  $\pm$  to the junction of this highway and Utah State Highway 53; proceed southeasterly along Utah State Highway 6.3 miles to its junction with an existing dirt road to the southwest, proceed southwesterly along this road 2.8 miles to its junction with an existing road to the southeast, proceed southeasterly 3.2 miles to the beginning of the proposed access road, to be discussed in item #2.

The highways mentioned in the foregoing paragraph are bituminous surfaced roads to the point where Highway 53 ends, thereafter the roads are constructed with existing materials and gravel. The highways are maintained by Utah State road crews. All other roads are maintained by County Crews.

The aforementioned dirt oilfield service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads required for access during the drilling, completion and production phase will be maintained at the standards required by the BLM or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal.

**2. PLANNED ACCESS ROAD**

See Topographic Map "B".

The planned access road leaves the existing location described in Item #1 in the NE 1/4 NW 1/4 Section 31, T8S, R17, S.L.B., and proceeds in a westerly direction approximately .1 mile + to the proposed location site.

The planned access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is determined necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%.

There will be no culverts required along this access road. There will be no water turnouts constructed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

3. **LOCATION OF EXISTING WELLS**

There are twelve (12) producing, and two (2) injection, Inland Production wells, one (1) producing, and one (1) P&A Balcron wells, within a one (1) mile radius of this well. See Exhibit "D".

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery the well pad will be surrounded by a dike of sufficient capacity to contain at minimum the entire contents of the largest tank within the facility battery.

Tank batteries will be built to BLM specifications.

All permanent (on site for six (6) months or longer) structures constructed or installed (including pumping units will be painted Desert Tan. All facilities will be painted within six months of installation.

5. **LOCATION AND TYPE OF WATER SUPPLY**

Inland Production Company has purchased a 3" water connection with Johnson Water District to supply the Monument Butte oilfield. Johnson Water District has given permission to Inland Production Company to use water from our system for the purpose of drilling and completing the Tar Sands Federal # 3-31.

Existing water for this well will be trucked from Inland Production Company's water supply line located at the Gilsonite State #7-32 (SW/NE Sec. 32, T8S, R17E), or the Monument Butte Federal #5-35 (SW/NW Sec. 35, T8S, R16E), or the Travis Federal #15-28 (SW/SE Sec. 28, T8S, R16E). See exhibit "C".

There will be no water well drilled at this site.

6. **SOURCE OF CONSTRUCTION MATERIALS**

See Location Layout Sheet - Exhibit "E".

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road. (Pit lining material is referred to in Item #7.)

A mineral material application is not required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

See Location Layout Sheet - Exhibit "E".

A small reserve pit (80X30X6' deep or less) will be constructed from native soil and clay materials. A water processing unit will be employed to continuously recycle the drilling fluid as it is used, returning the fluid component to the drilling rig's steel tank. The reserve pit will primarily receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, ect., will be promptly reclaimed by the water recycling unit and then returned to the steel fir tanks. All drilling fluids will be fresh water based containing DAP (Di-Ammonium Phosphate, commonly known as fertilizer), typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be utilized in the reserve pit.

All completion fluids, frac gels, etc., will be contained in steel tanks and hauled away to approved commercial disposal, as necessary.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

Immediately upon first production, all produced water will be confined in storage tanks. Inland requests temporary approval to transfer the produced water to Inland's nearby waterflood, for re-injection into the waterflood reservoirs via existing approved injection wells. Within 90 days of first production, a water analysis will be submitted to the Authorized Officer, along with an application for approval of this, as a permanent disposal method.

8. **ANCILLARY FACILITIES**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. **WELL SITE LAYOUT**

See attached Location Layout Sheet - Exhibit "E".

The reserve pit will be located on the south side between stakes 4 & 5.

No flare pit will be used at this location.

The stockpiled topsoil (first six (6) inches) will be stored on the west corner, between stakes 7 & 8.

Access to the well pad will be from the east, between stakes 2 & 3.

**Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39" net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be cemented and/or braced in such a manner to keep tight at all times.
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

**10. PLANS FOR RESTORATION OF SURFACE**

- a) *Producing Location*

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be re contoured to the approximated natural contours. The reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons, removed.

When the drilling and completion phase ends, reclamation of unused disturbed areas on the well pad/access road no longer needed for operations, such as cut slopes, and fill areas will be accomplished by grading, leveling and seeding as recommended by the Authorized Officer. The seed mixture will be per B.L.M. and stated in the conditions of approval.

- b) *Dry Hole Abandoned Location*

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the B.L.M. will attach the appropriate surface rehabilitation conditions of approval.

11. SURFACE OWNERSHIP - Bureau Of Land Management

12. OTHER ADDITIONAL INFORMATION

- a) Inland Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Inland is to immediately stop work that might further disturb such materials, and contact the Authorized Officer.
- b) Inland Production will control noxious weeds along rights-of-way for roads, pipelines, well sites, or other applicable facilities. On B.L.M. administered land it is required that a Pesticide Use Proposal shall be submitted, and given approval, prior to the application of herbicides or other possible hazardous chemicals.
- c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without B.L.M. authorization. However, if B.L.M. authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

*Additional Surface Stipulations*

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations. Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. Inland Production is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

*Hazardous Material Declaration*

Inland Production Company guarantees that during the drilling and completion of the Tar Sands Federal #3-31, we will not use, produce, store, transport, or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Inland also guarantees that during the drilling and completion of the Tar Sands Federal #3-31, we will use, produce, store, transport, or disposal less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Inland Production Company or a contractor employed by Inland Production shall contact the B.L.M. office at (801) 789-1362, 48 hours prior to construction activities.

The B.L.M. office shall be notified upon site completion prior to moving on the drilling rig.

13. LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

Representative

Name: Brad Mecham

Address: P.O. Box 1446 Roosevelt, Utah 84066

Telephone: (801) 722-5103

Certification

Please be advised that INLAND PRODUCTION COMPANY is considered to be the operator of Tar Sands Federal #9-31 NE/SE Section 31, Township 8S, Range 17E: Lease lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4488944.

I hereby certify that I, or persons under my direct supervision have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Inland Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

10-2-96  
Date

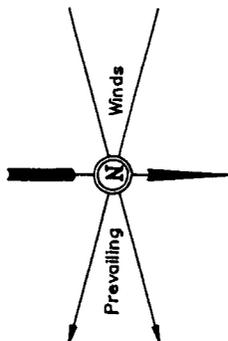
Brad Mecham  
Brad Mecham  
District Manager

INLAND PRODUCTION CO.

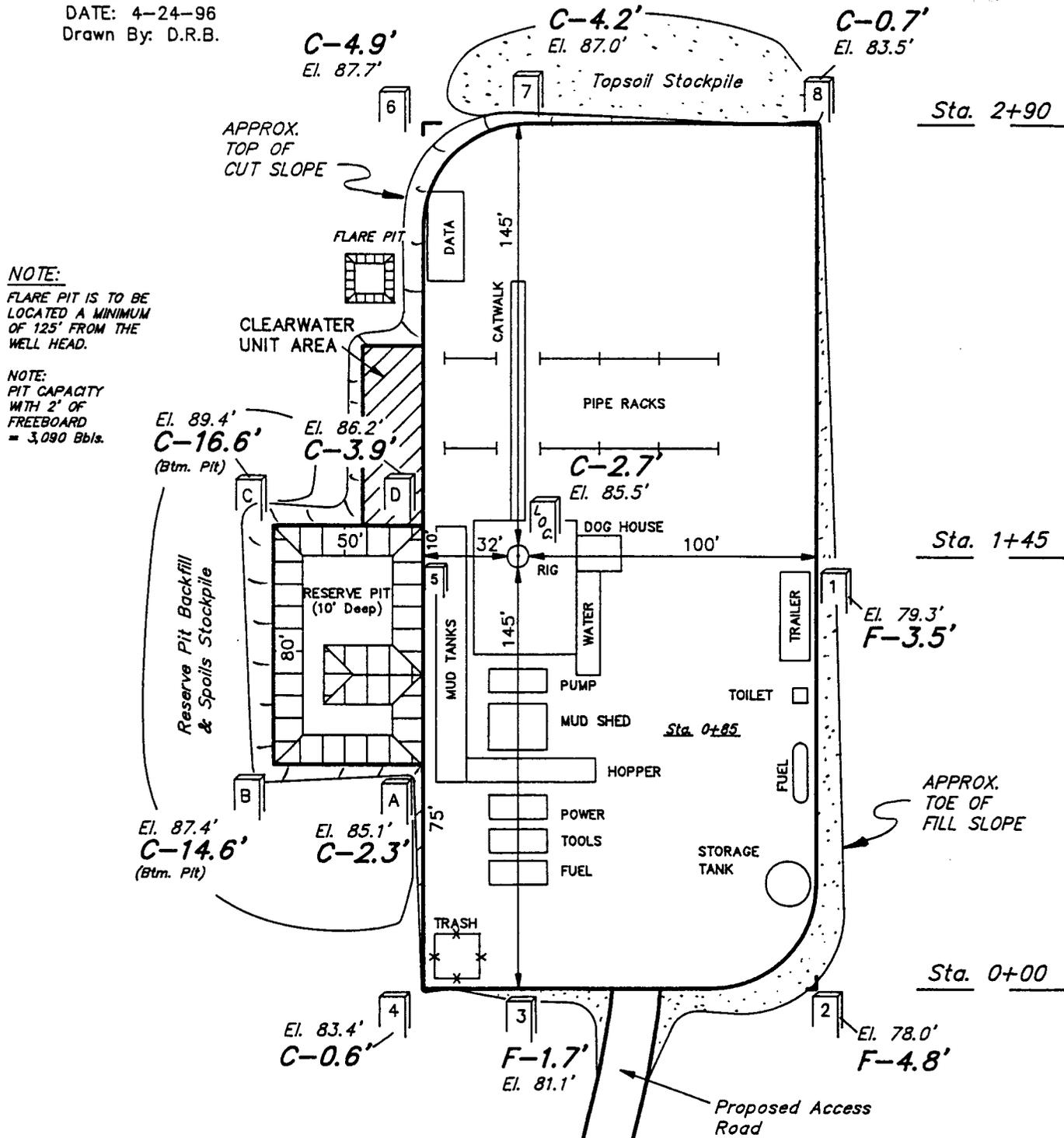
LOCATION LAYOUT FOR

TAR SANDS FEDERAL #3-31  
SECTION 31, T8S, R17E, S.L.B.&M.

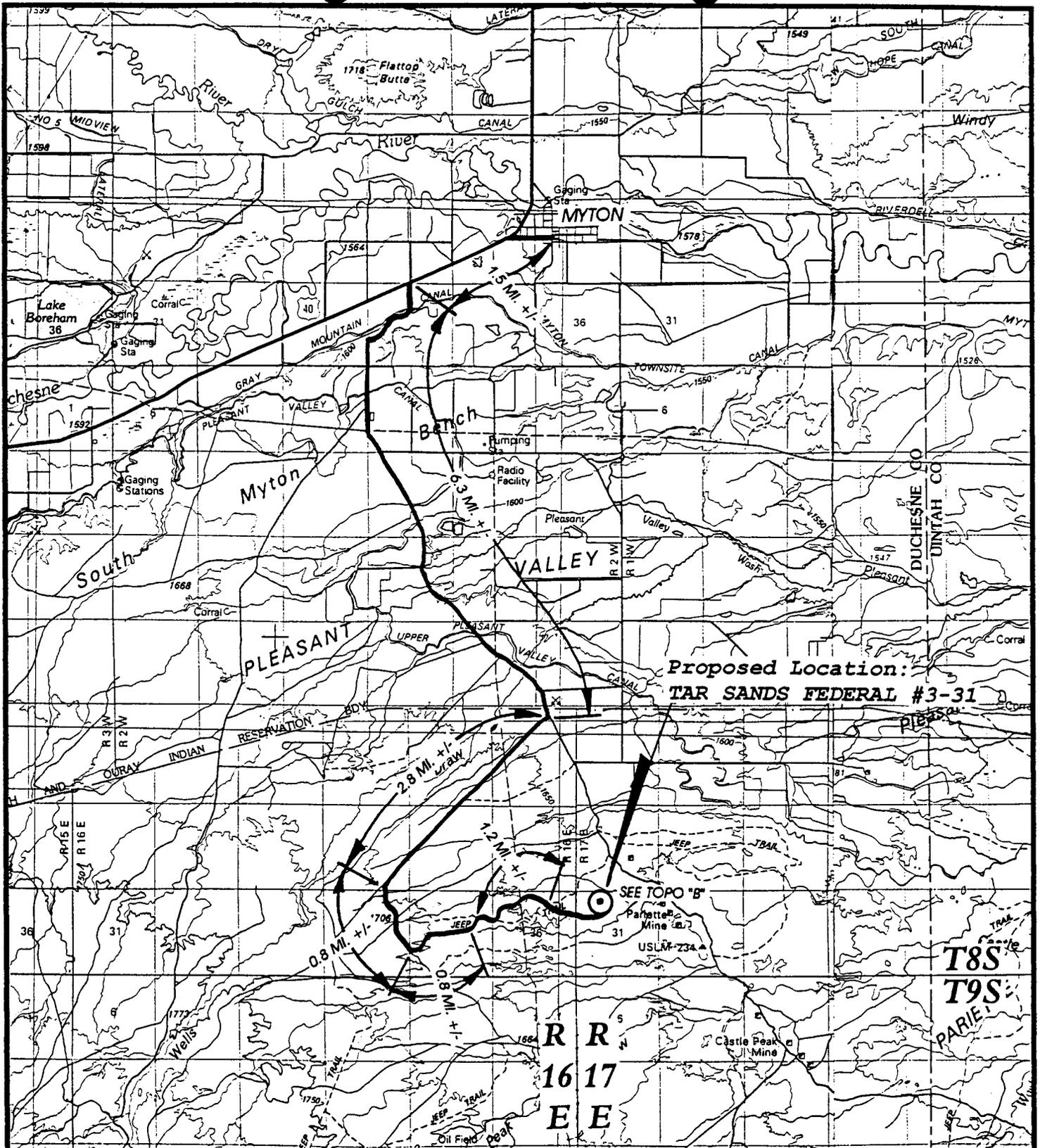
711' FNL 1978' FWL



SCALE: 1" = 50'  
DATE: 4-24-96  
Drawn By: D.R.B.



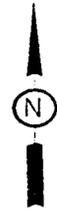
Elev. Ungraded Ground at Location Stake = 5285.5'  
Elev. Graded Ground at Location Stake = 5282.8'



UELS

TOPOGRAPHIC  
 MAP "A"

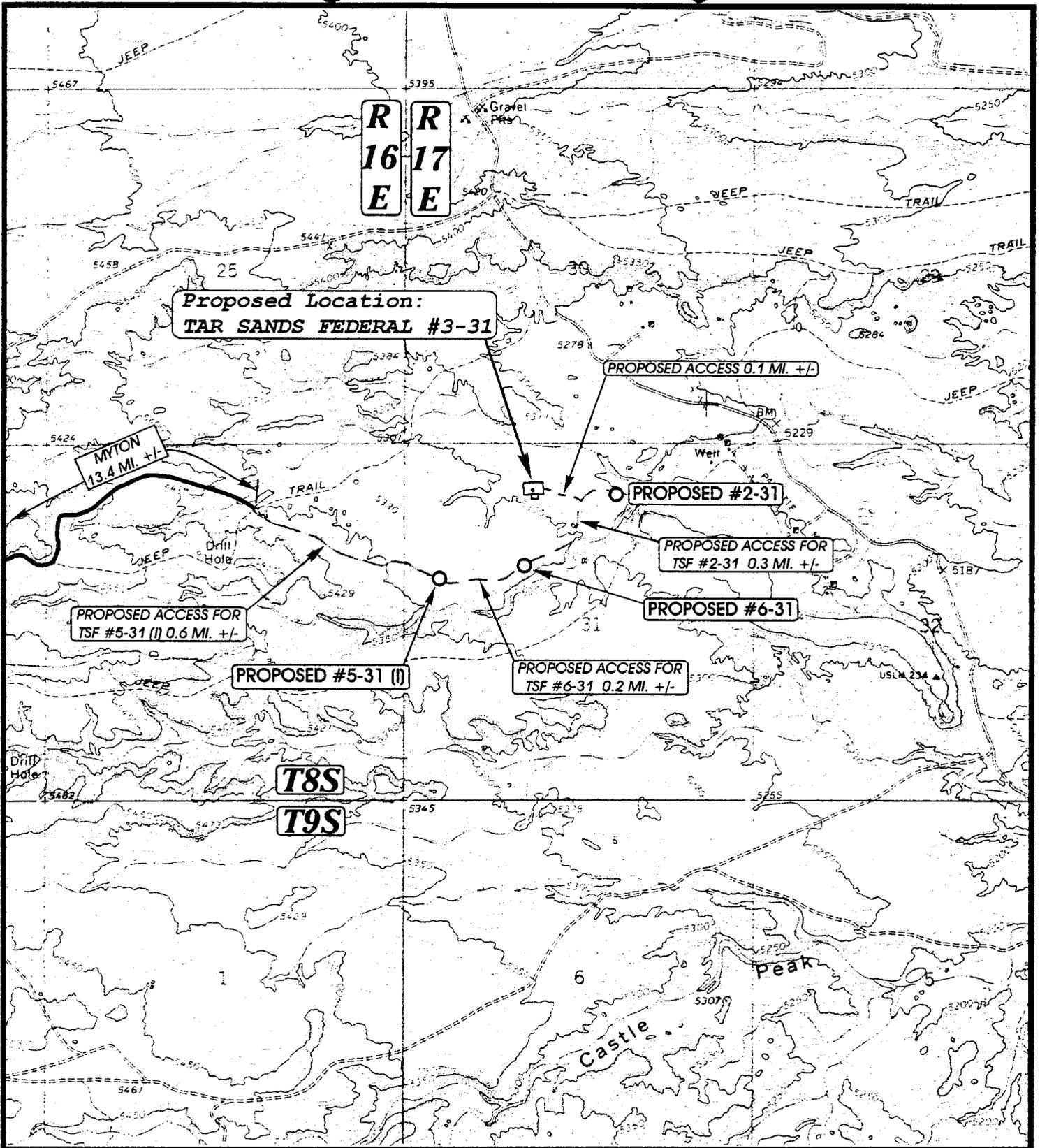
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 Drawn by: D.COX



INLAND PRODUCTION CO.

TAR SANDS FEDERAL #3-31  
 SECTION 31, T8S, R17E, S.L.B.&M.  
 711' FNL 1978' FWL

UINTAH ENGINEERING & LAND SURVEYING  
 85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017



**UEIC**

**TOPOGRAPHIC  
MAP "B"**

**DATE: 4-25-96  
Drawn by: D.COX**

**UINTAH ENGINEERING & LAND SURVEYING**  
85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017

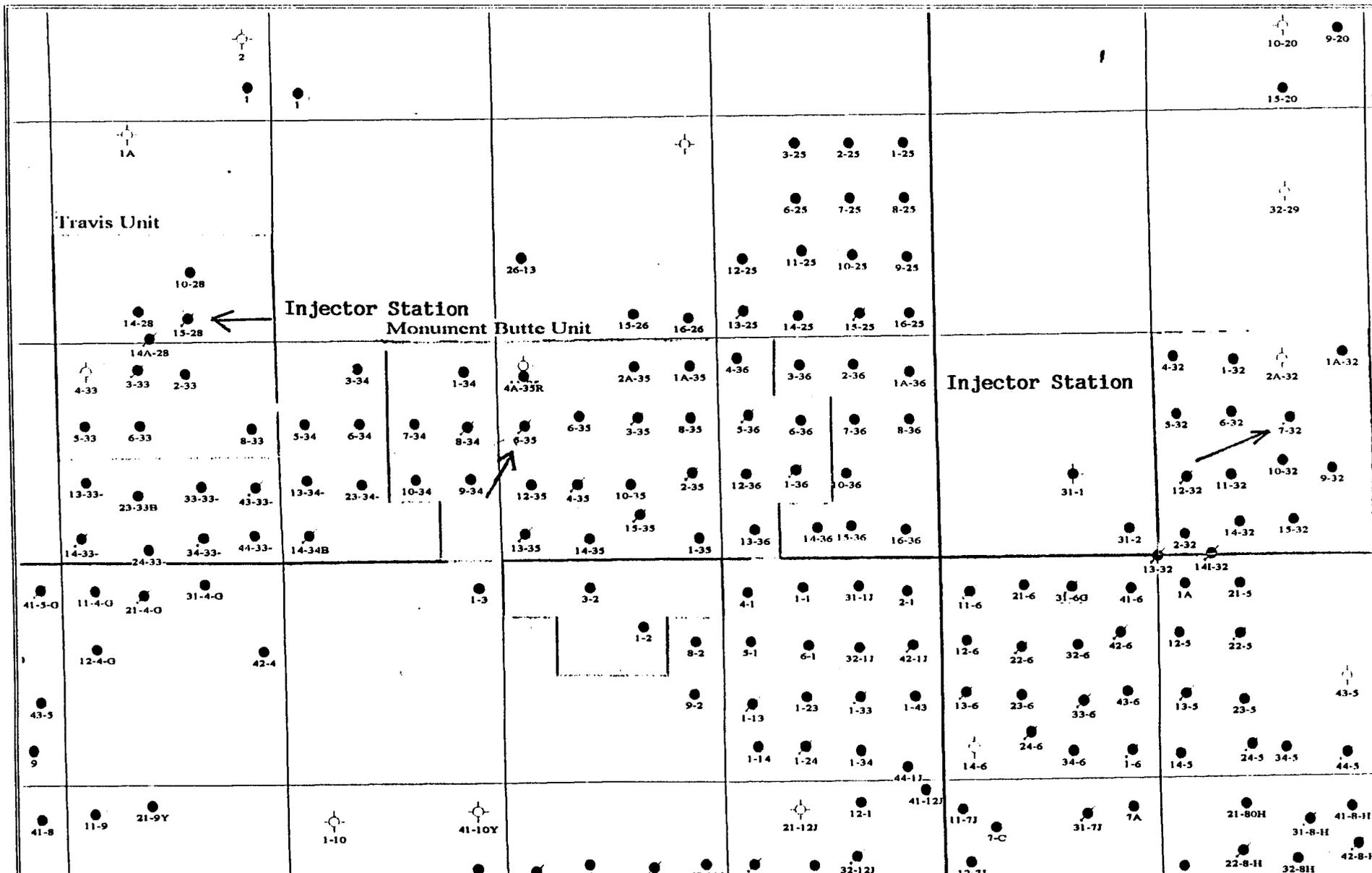


**INLAND PRODUCTION CO.**

**TAR SANDS FEDERAL #3-31  
SECTION 31, T8S, R17E, S.L.B.&M.  
711' FNL 1978' FWL**

**SCALE: 1" = 2000'**

EXHIBIT "C"



**Inland**  
 475 17<sup>th</sup> Street, Suite 1500  
 Denver, Colorado 80102  
 Phone: (303) 291-0900

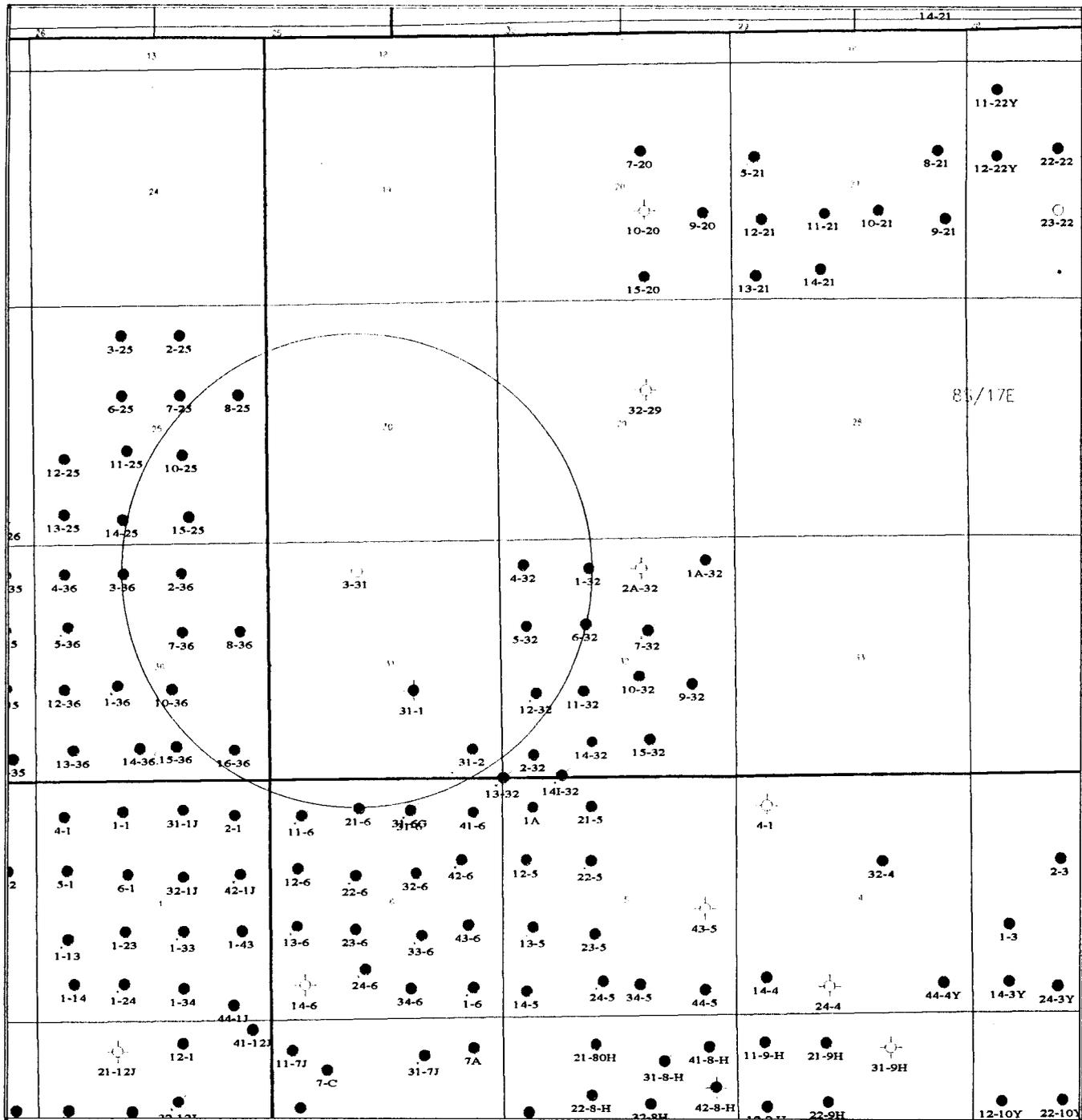
Regional Area

Dechase Counties, Utah

Date: 3/7/96 J.A.



Exhibit "D"



**Inland**  
RESOURCES INC.

475 17<sup>th</sup> Street Suite 1500  
Denver, Colorado 80202  
Phone: (303)-292-0900

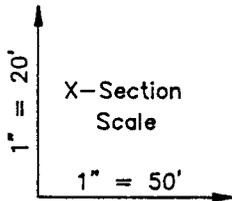
**One Mile Radius**  
Tar Sands Federal #3-31  
Duchesne County, Utah

Date: 4-15-96 J.A.

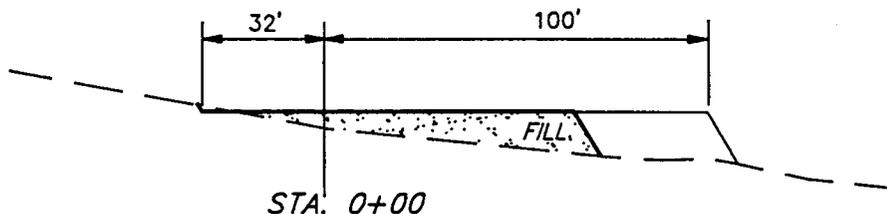
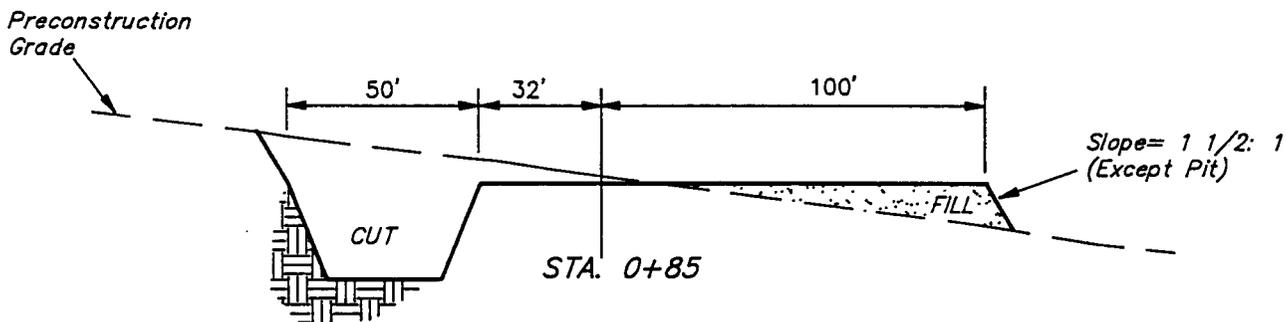
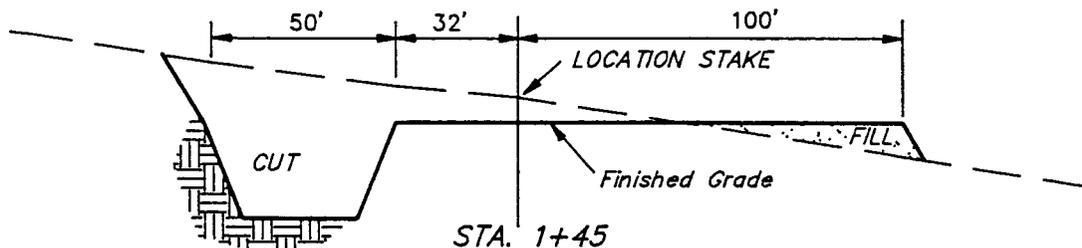
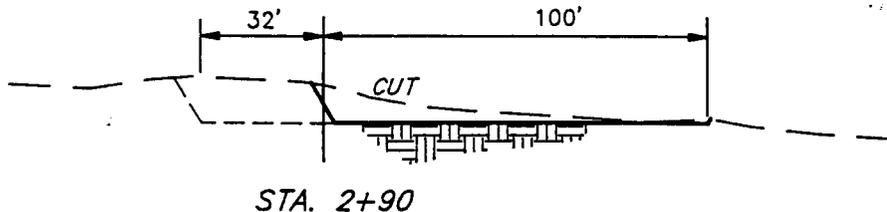
INLAND PRODUCTION CO.

TYPICAL CROSS SECTIONS FOR

TAR SANDS FEDERAL #3-31  
SECTION 31, T8S, R17E, S.L.B.&M.  
711' FNL 1978' FWL



DATE: 4-24-96  
Drawn By: D.R.B.



APPROXIMATE YARDAGES

CUT		
(6") Topsoil Stripping	= 780	Cu. Yds.
Remaining Location	= 2,610	Cu. Yds.
<b>TOTAL CUT</b>	<b>= 3,390</b>	<b>CU.YDS.</b>
<b>FILL</b>	<b>= 2,040</b>	<b>CU.YDS.</b>

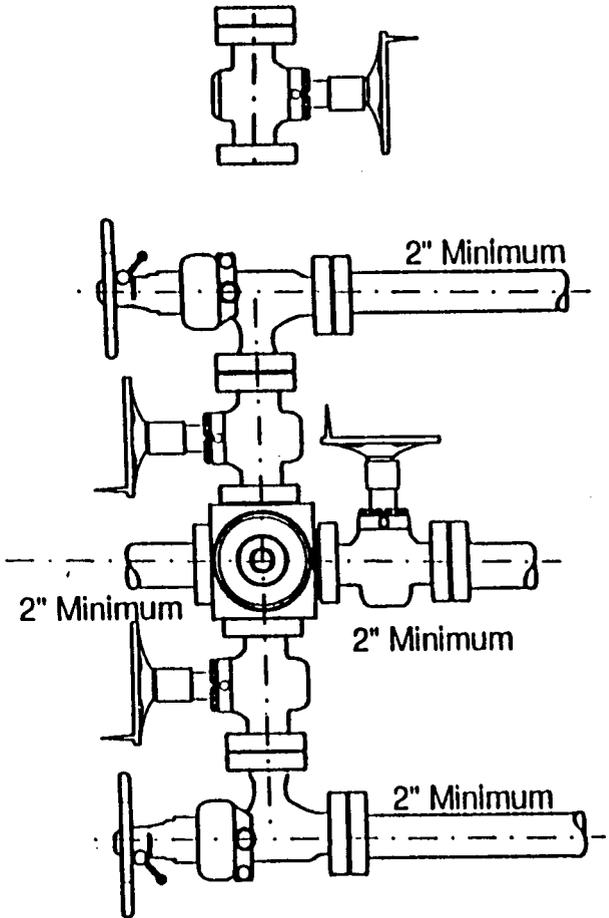
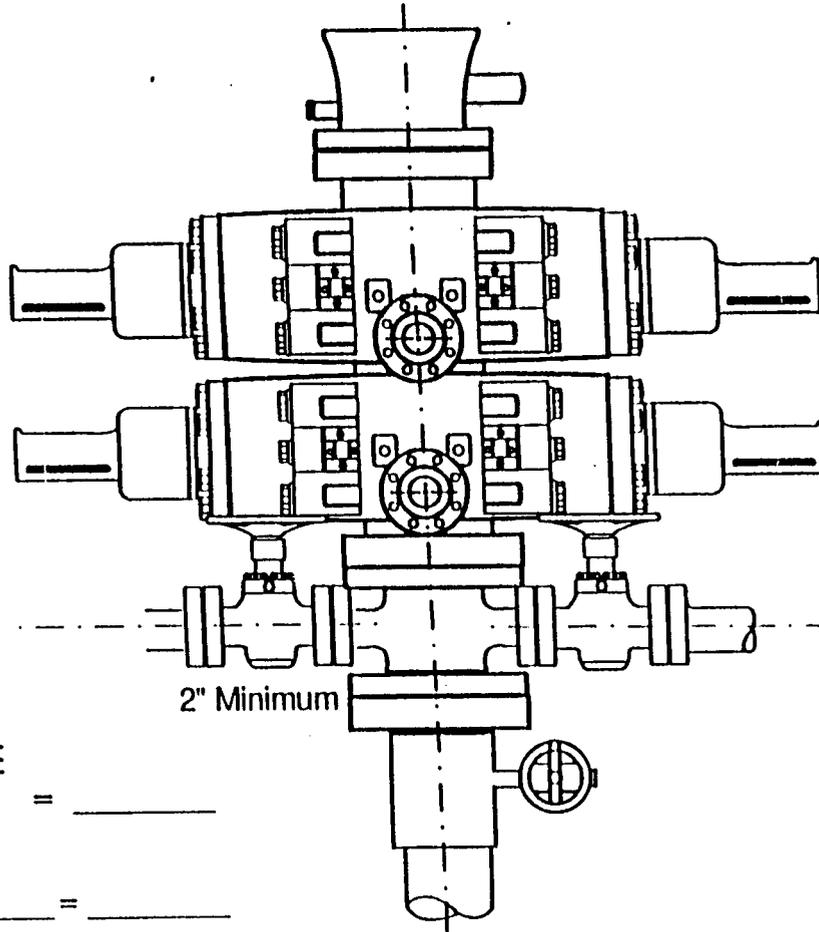
EXCESS MATERIAL AFTER 5% COMPACTION	= 1,240	Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 1,240	Cu. Yds.
EXCESS MATERIAL After Reserve Pit is Backfilled & Topsoil is Re-distributed	= 0	Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017

# 2-M SYSTEM

EXHIBIT F

RAM TYPE B.O.P.  
 Make:  
 Size:  
 Model:



GAL TO CLOSE  
 Annular BOP = \_\_\_\_\_  
 Ramtype BOP  
 \_\_\_\_\_ Rams x \_\_\_\_\_ = \_\_\_\_\_  
 = \_\_\_\_\_ Gal.  
 \_\_\_\_\_ x 2 = \_\_\_\_\_ Total Gal.

Rounding off to the next higher  
 increment of 10 gal. would require  
 \_\_\_\_\_ Gal. (total fluid & nitro volume)

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/07/96

API NO. ASSIGNED: 43-013-31733

WELL NAME: TAR SANDS FEDERAL #3-31  
OPERATOR: INLAND PRODUCTION COMPANY (N5160)

PROPOSED LOCATION:  
NENW 31 - T08S - R17E  
SURFACE: 0711-FNL-1978-FWL  
BOTTOM: 0711-FNL-1978-FWL  
DUCHESNE COUNTY  
MONUMENT BUTTE FIELD (105)

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

LEASE TYPE: FED  
LEASE NUMBER: U - 74869

PROPOSED PRODUCING FORMATION: GRRV

RECEIVED AND/OR REVIEWED:

Plat  
 Bond: Federal [ State [] Fee []  
(Number 4488944)  
 Potash (Y/N)  
 Oil shale (Y/N)  
 Water permit  
(Number MBFD 5-35)  
 RDCC Review (Y/N)  
(Date: \_\_\_\_\_)

LOCATION AND SITING:

\_\_\_\_ R649-2-3. Unit: \_\_\_\_\_  
 R649-3-2. General.  
\_\_\_\_ R649-3-3. Exception.  
\_\_\_\_ Drilling Unit.  
\_\_\_\_ Board Cause no: \_\_\_\_\_  
\_\_\_\_ Date: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

STIPULATIONS: \_\_\_\_\_

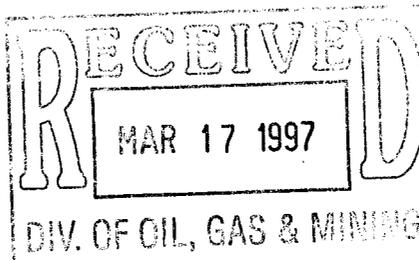
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL [X] DEEPEN [ ]
1b. TYPE OF WELL OIL WELL [X] GAS WELL [ ] OTHER [ ] SINGLE ZONE [ ] MULTIPLE ZONE [ ]
2. NAME OF OPERATOR Inland Production Company
3. ADDRESS OF OPERATOR P.O. Box 1446 Roosevelt, UT 84066 Phone: (801) 722-5103
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. \*) At Surface NE/NW At proposed Prod. Zone 711'FNL & 1978' FWL
5. LEASE DESIGNATION AND SERIAL NO. U-74869
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME Tar Sands Federal
9. WELL NO. #3-31
10. FIELD AND POOL OR WILDCAT Monument Butte
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec.31,T8S,R17E
12. County Duchesne 13. STATE UT
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* 13.4 miles south of Myton,Utah
15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.(Also to nearest drlg. unit line, if any) 1978'
16. NO. OF ACRES IN LEASE 1968.01
17. NO. OF ACRES ASSIGNED TO THIS WELL 40
18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT. 1429'
19. PROPOSED DEPTH 6500'
20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5282.8'
22. APPROX. DATE WORK WILL START\* 4Th Quarter 1996

23. PROPOSED CASING AND CEMENTING PROGRAM
Table with 5 columns: SIZE OF HOLE, SIZE OF CASING, WEIGHT/FOOT, SETTING DEPTH, QUANTITY OF CEMENT.
Row 1: 12 1/4, 8 5/8, 24#, 300', 120 sx Class G, 2% CaCl & 2% Gel
Row 2: 7 7/8, 5 1/2, 15.5#, TD, 400 sx Hilift followed by 330 sx Class G w/ 10% CaCl

The actual cement volumes will be calculated off of the open hole logs, plus 15% excess.



RECEIVED OCT 03 1996

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 Brad Mechem [Signature] TITLE District Manager DATE 9/23/96

(This space for Federal or State office use)

PERMIT NO. 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 [Signature] TITLE Assistant Field Manager Mineral Resources DATE MAR 13 1997

CONDITIONS OF APPROVAL ATTACHED See Instructions On Reverse Side

NOTICE OF APPROVAL 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.

44-080-7100-001

CONDITIONS OF APPROVAL  
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Inland Production Company

Well Name & Number: Tar Sands Fed. 3-31

API Number: 43-013-31732

Lease Number: U-74869

Location: NENW Sec. 31 T. 8S R. 17E

**NOTIFICATION REQUIREMENTS**

- Location Construction - at least forty-eight (48) hours prior to construction of location and access roads.
- Location Completion - prior to moving on the drilling rig.
- Spud Notice - at least twenty-four (24) hours prior to spudding the well.
- Casing String and Cementing - at least twenty-four (24) hours prior to running casing and cementing all casing strings.
- BOP and Related Equipment Tests - at least twenty-four (24) hours prior to initiating pressure tests.
- First Production Notice - within five (5) business days after new well begins, or production resumes after well has been off production for more than ninety (90) days.

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

## CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

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.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative by the operator to insure compliance.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

### A. DRILLING PROGRAM

#### 1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report **ALL** water shows and water-bearing sands to Tim Ingwell of this office **prior to setting the next casing string or requesting plugging orders**. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

#### 2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a 2M system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

#### Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

If conductor pipe is set it will be cemented to surface. If drive pipe is used it will be pulled prior to cementing surface casing.

As a minimum, the usable water shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the shallowest potential productive zone. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

#### 4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

#### 5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vaporproof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

The Gamma Ray and Induction Logs need to be pulled from TD to the Surface Shoe.

A cement bond log (CBL) will be run from the production casing shoe to **TOP OF CEMENT** and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

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 not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. 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. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

The Vernal District Office shall be notified, during regular work hours (7:45 a.m.-4:30 p.m., Monday through Friday except holidays), at least 24 hours **prior** to spudding the well.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

A schematic facilities diagram as required by 43 CFR 3162.7-5 (b.9. d.), and shall be submitted to the appropriate District Office within sixty (60) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (b. 4).

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO 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. 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 AO or his representative, or the appropriate Surface Managing Agency.

7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the AO.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted following initial installation and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report 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.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approval or notification is necessary, please contact one of the following individuals:

Wayne Bankert           (801) 789-4170  
Petroleum Engineer

Ed Forsman             (801) 789-7077  
Petroleum Engineer

Jerry Kenczka          (801) 789-1190  
Petroleum Engineer

BLM FAX Machine       (801) 781-4410

## EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

- Unused fracturing fluids or acids
- Gas plant cooling tower cleaning wastes
- Painting wastes
- Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spend solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom reclaimers
- Used equipment lubrication oils
- Waste compressor oil, filters, and blowdown
- Used hydraulic fluids
- Waste solvents
- Waste in transportation pipeline-related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractory bricks
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation and miscellaneous solids.

### SURFACE USE PROGRAM

-Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, (1989).

-All vehicle travel will be confined to existing access road rights-of-way.

-The drainage which enters the location on the south side will be diverted around the west end of the location between the topsoil and the location.

#### -Ferruginous Hawk

1. No new construction or surface disturbing activities will be conducted within a 0.5 mile radius of an inactive nest. This COA may be modified based on one or more of the following mitigative opportunities:

a. The nest has showed no signs of breeding/nesting activity for a least two consecutive breeding seasons or,

b. The biologist has determined that the nests in question are in such poor condition that monitoring the nests for two breeding seasons is not necessary.

c. Artificial Nesting Platforms will be constructed and placed by the operator. Up to 3 platforms will be constructed for each natural nest involved in mitigation. The BLM AO will determine the placement of the platforms.

2. From May 30 through February 28, new construction or surface-disturbing activities will be conducted within a 0.5 mile of an inactive nest subject to the following restrictions

a. Where possible, well pads proposed for construction within 0.25 miles of an inactive nest will be placed where permanent facilities will not be visible from the nest. Access roads to well pads will be designed to avoid line-of-sight visibility from inactive nests to the maximum extent practical.

b. Wells proposed within 0.5 miles of an inactive nest will be either converted to injection wells or equipped with muffled multi-cylinder engines or with equipment of comparable quietness.

3. Road access from the main road will be limited to a single-lane improved road for each well. During normal operations human access to injection wells will be limited to 4 trips per month by a single lease operator driving a full size pickup. Human access to producing wells will be limited to 1 trip per day by a single lease operator driving a full-size pickup.

4. Storage tanks and heater-treaters for new wells will be positioned at least 0.5 mile from the inactive nest in common tank/treater batteries or will use an existing facility. No crude oil haul/tanker trucks will enter the 0.5 mile radius from an inactive nest.



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

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

March 18, 1997

Inland Production Company  
P.O. Box 1446  
Roosevelt, Utah 84066

Re: Tar Sands Federal 3-31 Well, 711' FNL, 1978' FWL, NE NW,  
Sec. 31, T. 8 S., R. 17 E., Duchesne 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 43-013-31733.

Sincerely,

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

R. J. Firth  
Associate Director

lwp  
Enclosures

cc: Duchesne County Assessor  
Bureau of Land Management, Vernal District Office

Operator: Inland Production Company  
Well Name & Number: Tar Sands Federal 3-31  
API Number: 43-013-31733  
Lease: U-74869  
Location: NE NW Sec. 31 T. 8 S. R. 17 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)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact R. J. Firth (801)538-5274 or Mike Hebertson at (801) 538-5333.

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.

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: INLAND PRODUCTION CO.

Well Name: TAR SANDS FEDERAL 3-31

Api No. 43-013-31733

Section: 31 Township: 8S Range: 17E County: DUCHESNE

Drilling Contractor

Rig #

SPUDDED:

Date 7/3/97

Time 3:15 PM

How DRY HOLE

Drilling will commence

Reported by CHERYL CAMERON

Telephone # 1-801-789-1866

Date: 7/8/97 Signed: JLT

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

1. Type of Well [X] Oil Well [ ] Gas well [ ] Other
2. Name of Operator Inland Production Company
3. Address and Telephone No. P.O. Box 790233 Vernal, UT 84079 Phone No. (801) 789-1866
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) NE/NW 711' FNL & 1978' FWL Sec. 31, T8S, R17E

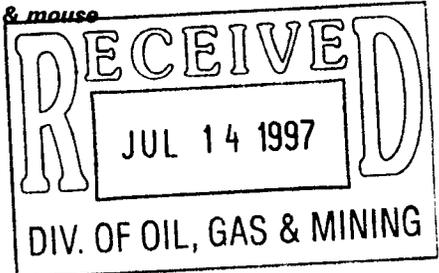
5. Lease Designation and Serial No. U-74869
6. If Indian, Allottee or Tribe Name
7. If unit or CA, Agreement Designation
8. Well Name and No. Tar Sands Federal #3-31
9. API Well No. 43-013-31733
10. Field and Pool, or Exploratory Area Monument Butte
11. County or Parish, State Duchene, UT

12 CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA
TYPE OF SUBMISSION: [ ] Notice of Intent, [X] Subsequent Report, [ ] Final Abandonment Notice
TYPE OF ACTION: [ ] Abandonment, [ ] Recompletion, [ ] Plugging Back, [ ] Casing repair, [ ] Altering Casing, [X] Other Surface Spud, [ ] Change of Plans, [ ] New Construction, [ ] Non-Routine Fracturing, [ ] Water Shut-off, [ ] Conversion to Injection, [ ] Dispose Water

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)

Drilled 12 1/4" hole w/ Leon Ross Rathole Rig to 305'. Run 296.30' of 8 5/8" 24# J-55 ST&C csg. Pump 20 bbls dye wtr & 10 bbls gel. Cmt w/ 120 sx Prem + w/ 2% CC, 2% gel, + 1/4#/sk flocele, 14.8 ppg 1.37 ft/sk yield. Good returns w/ 6 bbls cmt to surface. Drill rathole & mouse hole f/ Four Corners, Rig #6. RDMOL.

SPUD SURFACE HOLE W/ LEON ROSS RATHOLE RIG @ 3:15 PM 7/3/97.



14. I hereby certify that the foregoing is true and correct
Signer: Cheryl Cameron Title: Regulatory Compliance Specialist Date: 7/11/97

(This space of Federal or State office use.)
Approved by: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_
Conditions of approval, if any:

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

16:38 No. 009 P.02  
Jul 08, 97

INLAND PRODUCTION CO. TEL: 801-722-5103

STATE OF UTAH  
DIVISION OF OIL GAS AND MINES

ENTITY ACTION FORM - FORM 5

OPERATOR Inland Production Company

OPERATOR ACCT. NO. N 5160

ADDRESS P. O. Box 790233

Vernal, UT 84079

ACTION CODE	EXISTING ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION				COUNTY	SPUD DATE	EFFECTIVE DATE
					00	SC	TP	RS			
A	99999	12162	43-013-31733	Tar Sands Federal 3-31	NENW	31	8S	17E	Duchesne	7/3/97	7/3/97
WELL 1 COMMENTS: Entity added 7-8-97. See											
A	99999	12163	43-013-31686	Tar Sands Federal 6-31	SENW	31	8S	17E	Duchesne	7/7/97	7/7/97
WELL 2 COMMENTS: Entity added 7-8-97. See											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

13 891

Cheryl Cameron  
Signature Cheryl Cameron  
RCS  
7/8/97  
Date  
Phone No. (801) 789-1866

---

# Facsimile Cover Sheet

**To: Lisha Cordova**  
**Company: State of Utah**  
**Phone: (801) 538-5296**  
**Fax: (801) 359-3940**

**From: Cheryl Cameron**  
**Company: Inland Production Company**  
**Phone: (801) 789-1866**  
**Fax: (801) 789-1877**

**Date: 7/8/97**

**Pages including this  
cover page: 2**

**Comments: Entity Action Form for Tar Sands Federal #3-31 &  
Tar Sands Federal #6-31.**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Designation and Serial No.  
**U-74869**

6. If Indian, Allottee or Tribe Name

7. If unit or CA, Agreement Designation

8. Well Name and No.  
**Tar Sands Federal #3-31**

9. API Well No.  
**43-013-31733**

10. Field and Pool, or Exploratory Area  
**Monument Butte**

11. County or Parish, State  
**Duchene, UT**

*SUBMIT IN TRIPLICATE*

1. Type of Well  
 Oil Well     Gas well     Other

2. Name of Operator  
**Inland Production Company**

3. Address and Telephone No.  
**P.O. Box 790233 Vernal, UT 84079    Phone No. (801) 789-1866**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**NE/NW                      711' FNL & 1978' FWL  
Sec. 31, T8S, R17E**

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

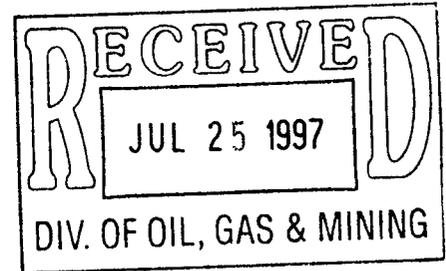
TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input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

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

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)

**WEEKLY STATUS REPORT FOR WEEK OF 7/8/97 - 7/13/97:**

**Drilled 7 7/8" hole from 305' - 6075' w/ Four Corners, Rig #6. Set 6033.86' of 5 1/2" 15.5# J-55 LT&C csg. Pump 20 bbls dye wtr & 20 bbls gel wtr. Cmt w/ 340 sx Hibond 65 Mod, 11.0 ppg, 3.0 ft/sk yield & 320 sx Thixo w/ 10% CalSeal, 14.2 ppg, 1.59 ft/sk yield. Good returns, no cmt to surf. Rig released @ 4:30 am 7/14/97. RDMOL.**



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

Signed *Cheryl Cameron*  
**Cheryl Cameron**

Title **Regulatory Compliance Specialist**

Date **7/18/97**

(This space of Federal or State office use.)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:

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

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.

**U-74869**

6. If Indian, Allottee or Tribe Name

7. If unit or CA, Agreement Designation

8. Well Name and No.

**Tar Sands Federal #3-31**

9. API Well No.

**43-013-31733**

10. Field and Pool, or Exploratory Area

**Monument Butte**

11. County or Parish, State

**Duchene, UT**

*SUBMIT IN TRIPLICATE*

1. Type of Well

Oil Well     Gas well     Other

2. Name of Operator

**Inland Production Company**

3. Address and Telephone No.

**P.O. Box 790233 Vernal, UT 84079    Phone No. (801) 789-1866**

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

**NE/NW                      711' FNL & 1978' FWL  
Sec. 31, T8S, R17E**

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

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

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

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directly drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)

**WEEKLY STATUS REPORT FOR WEEK OF 7/31/97 - 8/11/97:**

**Perf CP sd 5845'-5848', 5851'-5858', 5865'-5867', 5912'-5919',  
5953'-5958', 5969'-5974'**

**Perf A sd 5429'-5462', 5551'-5562'**

**Perf D sd 4964'-4969', 5047'-5049', 5051'-5055', 5066'-5070'**

**RIH w/ Production String. On production @ 5:30 pm, 8/11/97.**

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

Signature *Cheryl Cameron*  
**Cheryl Cameron**

Title **Regulatory Compliance Specialist**

Date **8/11/97**

(This space of Federal or State office use.)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

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

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

2. NAME OF OPERATOR  
Inland Production Company

3. ADDRESS OF OPERATOR  
P.O. Box 790233 Vernal, UT 84079 (801) 789-1866

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface NE/NW 711' FNL & 1978' FWL  
At top prod. interval reported below  
At total depth

5. LEASE DESIGNATION AND SERIAL NO.

U-74869

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Tar Sands Federal

9. WELL NO.

#3-31

10. FIELD AND POOL, OR WILDCAT

Monument Butte

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

Sec. 31, T8S, R17E

14. PERMIT NO. 43-013-31733 DATE ISSUED 3/13/97  
12. COUNTY OR PARISH Duchesne 13. STATE UT

15. DATE SPUDDED 7/3/97 16. DATE T.D. REACHED 7/12/97 17. DATE COMPL. (Ready to prod.) 8/11/97  
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 5282.8' GR 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 6075' 21. PLUG, BACK T.D., MD & TVD 6030' 22. IF MULTIPLE COMPL., HOW MANY\*  
23. INTERVALS DRILLED BY → ROTARY TOOLS X CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
Green River (Refer to perforations in Item #31.) 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN CBL, DLL, CNL 9-2397 27. WAS WELL CORED No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	24#	296.30'	12 1/4	120 sx Prem + w/ w% Gel 2% CC + 1/4#/sk	flocel
5 1/2	15.5#	6033.86'	7 7/8	340 sx Hibond & 320 sx Thixo	

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

PERFORATION RECORD	ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
CP 5845'-48', 5851'-58', 5865'-67', 5912'-19' A 5429'-62', 5551'-62' D 4964'-69', 5047'-49', 5051'-55', 5066'-70'	DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED See Back

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
8/11/97	Pumping - 2 1/2" X 1 1/2" X 12' X 15' X 16' RHAC pump	producing					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
14 Day Avg	8/97	N/A	→	61	133	7	2.2
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
		→					

34. DISPOSITION OF GAS (Solid, used for fuel, vented, etc.) TEST WITNESSED BY

Sold & Used for Fuel

35. LIST OF ATTACHMENTS

Logs in Item #26

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Cheryl Cameron TITLE Regulatory Compliance Specialist DATE 9/15/97

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

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Garden Gulch Mkr	4203'		#32.			
Point 3 Mkr	4475'		Perf CP 5845'-48', 5851'-58', 5865'-67'			
X Mkr	4710'		5912'-19', 5953'-58', 5969'-74'			
Y Mkr	4747'		Frac w/ 109,400# 20/40 sd in 573 BG			
Douglas Ck Mkr	4872'					
BiCarbonate	5112'		Perf A 5429'-62', 5551'-62'			
B Limestone Mkr	5234'		Frac w/ 106,000# 20/40 sd in 550 BG			
Castle Peak	5742'					
			Perf D 4964'-69', 5047'-49', 5051'-55', 5066'-70'			
			Frac w/ 107,100# 20/40 sd in 510 BG			



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

Michael O. Leavitt  
Governor

Ted Stewart  
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)

March 10, 1998

Newspaper Agency Corporation  
Legal Advertising  
PO Box 45838  
Salt Lake City, Utah 84145

Re: Notice of Agency Action - Cause No. UIC-207

Gentlemen:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please send proof of publication and billing to the Division of Oil, Gas and Mining, 1594 West North Temple, Suite 1210, P.O. Box 145801, Salt Lake City, Utah 84114-5801.

Sincerely,

*Lorraine Platt*

Lorraine Platt  
Secretary

Enclosure



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

Michael O. Leavitt  
Governor  
Ted Stewart  
Executive Director  
Lowell P. Braxton  
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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)

March 10, 1998

Uintah Basin Standard  
268 South 200 East  
Roosevelt, Utah 84066-9998

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Sincerely,

*Lorraine Platt*

Lorraine Platt  
Secretary

Enclosure

**Inland Production Company**  
**3-30, 1-30, 7-30, 11-30, 9-30, 15-30, 7-31 and 3-31 Wells**  
**Cause No. UIC-207**

Publication Notices were sent to the following:

Inland Production Company  
410 17th Street, Suite 700  
Denver, Colorado 80202

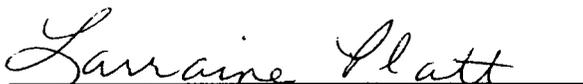
Inland Production Company  
P.O. Box 1446  
Roosevelt, Utah 84066

Newspaper Agency Corporation  
Legal Advertising  
P.O. Box 45838  
Salt Lake City, Utah 84145

Uintah Basin Standard  
268 South 200 East  
Roosevelt, Utah 84066

Vernal District Office  
Bureau of Land Management  
170 South 500 East  
Vernal, Utah 84078

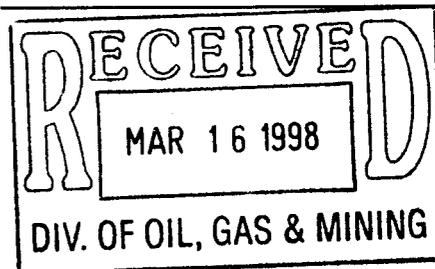
U.S. Environmental Protection Agency  
Region VIII  
Attn. Dan Jackson  
999 18th Street  
Denver, Colorado 80202-2466



Lorraine Platt

Secretary

March 10, 1998



March 10, 1998

Mr. Dan Jarvis  
State of Utah  
Division of Oil, Gas and Mining  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Permit Application for Water Injection Well  
Tar Sands Federal #3-31  
Monument Butte Field, Sand Wash Unit, Lease #U-74869  
Section 30-Township 8S-Range 17E  
Duchesne County, Utah

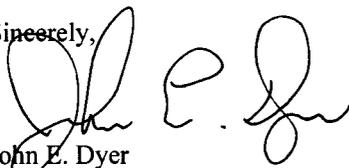
Dear Mr. Jarvis:

Inland Production Company herein requests the following approval(s):

1. Conversion of the Tar Sands Federal #3-31 from a producing oil well to a water injection well in the Monument Butte (Green River) Field;
2. Installation of an injection flowline. The proposed water injection line would leave the Tar Sands #3-31 and run approximately 1300' in a southwesterly direction, and tie into an existing line. The proposed line would be a 3" coated steel pipe, buried 5' below the surface.

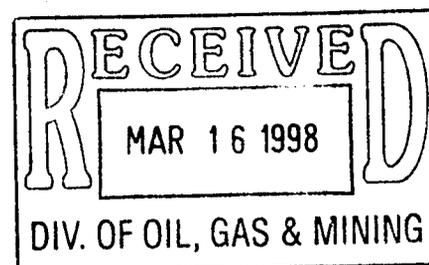
I hope you find this application complete; however, if you have any questions or require additional information, please contact Debbie Knight at (303) 382-4434.

Sincerely,

  
John E. Dyer  
Chief Operating Officer

**INLAND PRODUCTION COMPANY**  
**APPLICATION FOR APPROVAL OF CLASS II INJECTION WELL**  
**SAND WASH UNIT**  
**TAR SANDS FEDERAL #3-31**  
**MONUMENT BUTTE FIELD (GREEN RIVER) FIELD**  
**LEASE #U-74869**  
**MARCH 10, 1998**

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ATTACHMENT H-1	WELLBORE DIAGRAM OF PROPOSED PLUGGED WELL



# Tar Sands Federal #3-31

Spud Date: 7/8/97  
 Put on Production: 8/11/97  
 GL: 5283' KB: 5296'

Initial Production: 61 BOPD,  
 133 MCFPD, 7 BWPD

## Proposed Injection Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (296.30')  
 DEPTH LANDED: 294.56'(GL)  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 120 sxs Premium cmt, est 5 bbls cmt to surf.

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 144 jts. (6033.86')  
 DEPTH LANDED: 6075.54'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 340 sk HiBond mixed & 320 sxs thixotropic  
 CEMENT TOP AT: 977' per CBL

### TUBING

SIZE/GRADE/WT.: 2-7/8"/6.5#/M-50 tbg.  
 NO. OF JOINTS: 194 jts.  
 TUBING ANCHOR: 5823'  
 SEATING NIPPLE: 2-7/8" (1.10')  
 TOTAL STRING LENGTH: EOT @ 5985'  
 SN LANDED AT: 5917'

### SUCKER RODS

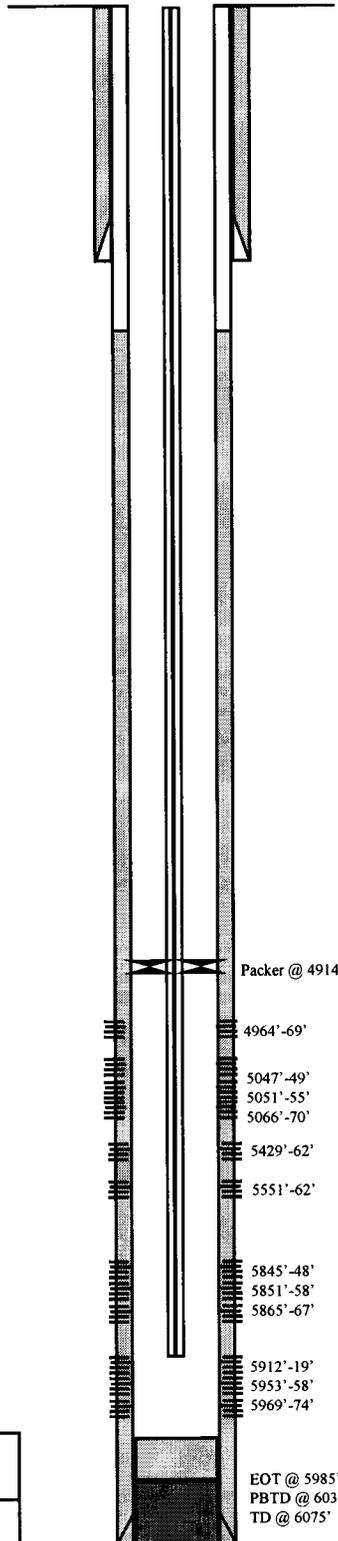
POLISHED ROD:  
 SUCKER RODS:  
 TOTAL ROD STRING LENGTH:  
 PUMP NUMBER:  
 PUMP SIZE:  
 STROKE LENGTH:  
 PUMP SPEED, SPM:  
 LOGS:

### FRAC JOB

8/2/97 5845'-5974' **Frac CP-2 & CP-4 sands as follows:**  
 109,400# of 20/40 sand in 573 bbls of Boragel. Broke down @ 2609 psi. Treated @ avg rate of 31.4 w/avg pressure of 1300 psi. ISIP-1912 psi. 5-min 1358 psi. Flowback on 12/64" ck for 2-1/2 hours until dead.

8/5/97 5429'-5562' **Frac A-3 & LODC sands as follows:**  
 106,000# of 20/40 sand in 550 bbls of Boragel. Broke down @ 2630 psi. Treated w/avg press of 1500 psi @ avg rate of 30.5 bpm. ISIP 1851 psi, 5-min 1740 psi, 10-min 1512 psi, 15-min 1443 psi. Start Flowback after 5-min SI @ 1 bpm until dead.

8/7/97 4964'-5070' **Frac C & D-2 sands as follows:**  
 107,100# of 20/40 sand in 510 bbls of Boragel. Breakdown @ 2043 psi. Treated @ avg rate of 27.5 bpm w/avg press of 2270 psi. ISIP-3261 psi, 5-min SI: 3141 psi. Flowback @ 1 bpm until dead.



### PERFORATION RECORD

Date	Depth Range	Tool Joint	Holes
8/1/97	5845'-5848'	4 JSPF	12 holes
8/1/97	5851'-5858'	4 JSPF	28 holes
8/1/97	5865'-5867'	4 JSPF	8 holes
8/1/97	5912'-5919'	4 JSPF	28 holes
8/1/97	5953'-5958'	4 JSPF	20 holes
8/1/97	5969'-5974'	4 JSPF	20 holes
8/5/97	5429'-5462'	2 JSPF	66 holes
8/5/97	5551'-5562'	4 JSPF	44 holes
8/6/97	4964'-4969'	4 JSPF	20 holes
8/6/97	5047'-5049'	4 JSPF	32 holes
8/6/97	5051'-5055'	4 JSPF	16 holes
8/6/97	5066'-5070'	4 JSPF	16 holes

EOT @ 5985'  
 PBDT @ 6030'  
 TD @ 6075'



**Inland Resources Inc.**

**Tar Sands Federal #3-31**

771 FNL 1978 FWL  
 NENW Section 31-T8S-R17E  
 Duchesne Co, Utah  
 API #43-013-31733; Lease #U-74869

## WORK PROCEDURE FOR INJECTION CONVERSION

1. **Rig up hot oil truck to casing. Pump water. Unseat pump. Flush rods. Trip out of hole with rods and pump.**
2. **Trip out of hole with tubing, breaking and doping every connection. Trip in hole with packer and tubing. Rig up water truck to casing. Pump packer fluid. Set packer.**
3. **Test casing and packer.**
4. **Rig down, move out.**

**REQUIREMENTS FOR INJECTION OF FLUIDS INTO RESERVOIRS  
RULE R615-5-1**

1. **Operations to increase ultimate recovery, such as cycling of gas, the maintenance of pressure, the introduction of gas, water or other substances into a reservoir for the purpose of secondary or other enhanced recovery or for storage and the injection of water into any formation for the purpose of water disposal shall be permitted only by order of the Board after notice and hearing.**
2. **A request for agency action for authority for the injection of gas, liquified petroleum gas, air, water or any other medium into any formation for any reason, including but not necessarily limited to the establishment of or the expansion of waterflood projects, enhanced recovery projects, and pressure maintenance projects shall contain:**

**2.1 The name and address of the operator of the project.**

Inland Production Company  
410 17<sup>th</sup> Street, Suite 700  
Denver, Colorado 80202

**2.2 A plat showing the area involved and identifying all wells, including all proposed injection wells, in the project area and within one-half mile of the project area.**

See Attachment A

**2.3 A full description of the particular operation for approval is requested.**

Approval is requested to convert the Tar Sands Federal #3-31 from a producing oil well to a water injection well in the Monument Butte (Green River) Field; and to install an injection line. The proposed water injection line would leave the Tar Sands Federal #3-31 and run approximately 1300' in a southwesterly direction, and tie into an existing line. The line would be a 3" coated steel pipe, buried 5' below the surface. See Attachment D.

**2.4 A description of the pools from which the identified wells are producing or have produced.**

The proposed injection well will inject into the Green River Formation.

**2.5 The names, description and depth of the pool or pools to be affected.**

The injection zone is in the Douglas Creek Member of the Green River Formation. At the Tar Sands Federal #3-31 well, the proposed injection zone is from 4964'-5974'. The confining stratum directly above and below the injection zone is the Douglas Creek Member of the Green River Formation, with the Douglas Creek Marker top at 5100'

**2.6 A copy of a log of a representative well completed in the pool.**

The referenced log for the Tar Sands Federal #3-31 is on file with the Utah Division of Oil, Gas and Mining.

- 2.7 A statement as to the type of fluid to be used for injection, its source and the estimated amounts to be injected daily.**

The type and source of fluid to be used for injection will be culinary water from the Johnson Water District supply line. The average estimated injection of fluids will be at a rate of 300 BPD, and the estimated maximum injection will be at a rate of 500 BPD.

- 2.8 A list of all operators and surface owners within one-half mile radius of the proposed project.**

See Attachment B.

- 2.9 An affidavit certifying that said operators or owners and surface owners within a one-half mile radius have been provided a copy of the petition for injection.**

See Attachment C.

- 2.10 Any additional information the Board may determine is necessary to adequately review the petition.**

Inland Production Company will supply any additional information requested by the Utah Division of Oil, Gas and Mining.

- 4.0 Establish recovery projects may be expanded and additional wells placed on injection only upon authority from the Board after notice and hearing or by administrative approval.**

This proposed injection well is on a State lease (Lease #U-74869), in the Monument Butte (Green River) Field, Sand Wash Unit, and this request is for administrative approval.

**REQUIREMENTS FOR CLASS II INJECTION WELLS INCLUDING WATER DISPOSAL,  
STORAGE AND ENHANCED RECOVERY WELLS  
SECTION V – RULE R615-5-2**

- 1. Injection well shall be completed, equipped, operated, and maintained in a manner that will prevent pollution and damage to any USDW, or other resources and will confine injected fluids to the interval approved.**
- 2. The application for an injection well shall include a properly completed Form DOGM-UIC-1 and the following:**

- 2.1 A plat showing the location of the injection well, all abandoned or active wells within a one-half mile radius of the proposed wells, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well.**

See Attachment A and B.

- 2.2 Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper and porosity.**

All logs are on file with the Utah Division of Oil, Gas and Mining.

- 2.3 A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented.**

A copy of the cement bond log is on file with the Utah Division of Oil, Gas and Mining.

- 2.4 Copies of logs already on file with the Division should be referenced, but need not be refiled.**

All copies of logs are on file with the Utah Division of Oil, Gas and Mining.

- 2.5 A description of the casing or proposed casing program of the injection well and of the proposed method for testing the casing before use of the well.**

The casing program is 8-5/8", 24#, J-55 surface casing run to 296.30' GL, and the 5-1/2" casing run from surface to 6033.86' KB. A casing integrity test will be conducted at the time of conversion. See Attachment E.

- 2.6 A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily.**

The type and source of fluid to be injected is culinary water from the Johnson Water District supply line. The estimated average rate of injection will be 300 BPD, and the estimated maximum rate of injection will be 500 BPD.

- 2.7 Standard laboratory analysis of the fluid to be injected, the fluid in the formation into which the fluid is being injected, and the compatibility of the fluids.**

See Attachment F, F-1, and F-2.

**2.8 The proposed average and maximum injection pressures.**

The proposed average injection pressure will be approximately 1100 psig and the maximum injection pressure will not exceed 1818 psig.

**2.9 Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter the fresh water strata.**

The fracture gradient for the Tar Sands Federal #3-31, for proposed zones (4964' – 5974') calculates at .77 psig/ft. The maximum injection pressures will be limited so as not to exceed this gradient. A step rate test will be performed periodically to ensure we are below parting pressure. The proposed maximum injection pressure is 1818 psig. See Attachment G thru G-3.

**2.10 Appropriate geological data on the injection interval and confining beds, including the geologic name, lithologic description, thickness, depth, and lateral extent.**

In the Tar Sands Federal #3-31, the injection zone (4964'-5974') is in the Douglas Creek member of the Green River Formation. The reservoir is a very fine-grained sandstone with minor imbedded shale streaks. The estimated porosity is 13%. The Douglas Creek member is composed of porous and permeable lenticular calcareous sandstone and low porosity carbonates and calcareous shale. The porous and lenticular sandstone varies in thickness from 0-31', and is confined to the Monument Butte Field. Outside the Monument Butte Field, the sandstone is composed of tight, very fine, silty, calcareous sandstone, less than 3' thick. The stratum confining the injection zone is composed of tight, moderately calcareous, sandy lacustrine shale. All of the confining strata are impermeable, and will effectively seal off the oil, gas, and water of the injection zone from any strata directly above or below it.

**2.11 A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no conduit exists that could enable fluids to migrate up or down the wellbore and enter the improper intervals.**

See Attachments E through E-10.

Additionally, the injection system will be equipped with high and low pressure shut down devices that will automatically shut in injection waters if a system blockage or leakage occurs. One way check valves will also ensure proper flow management. Relief valves will also be utilized for high-pressure relief.

**2.12 An affidavit certifying that a copy of the application has been provided to all operators or owners, and surface owners within a one-half mile radius of the proposed injection well.**

See Attachment C.

**2.13 Any other information that the Board or Division may determine is necessary to adequately review the application.**

Inland Production Company will supply any requested information to the Board or Division.



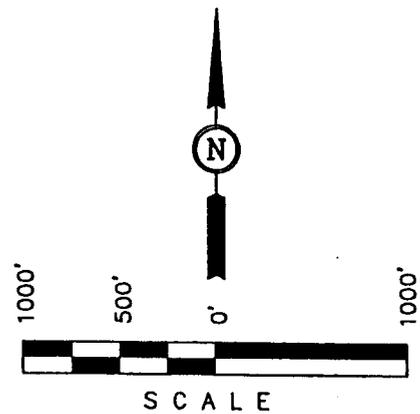
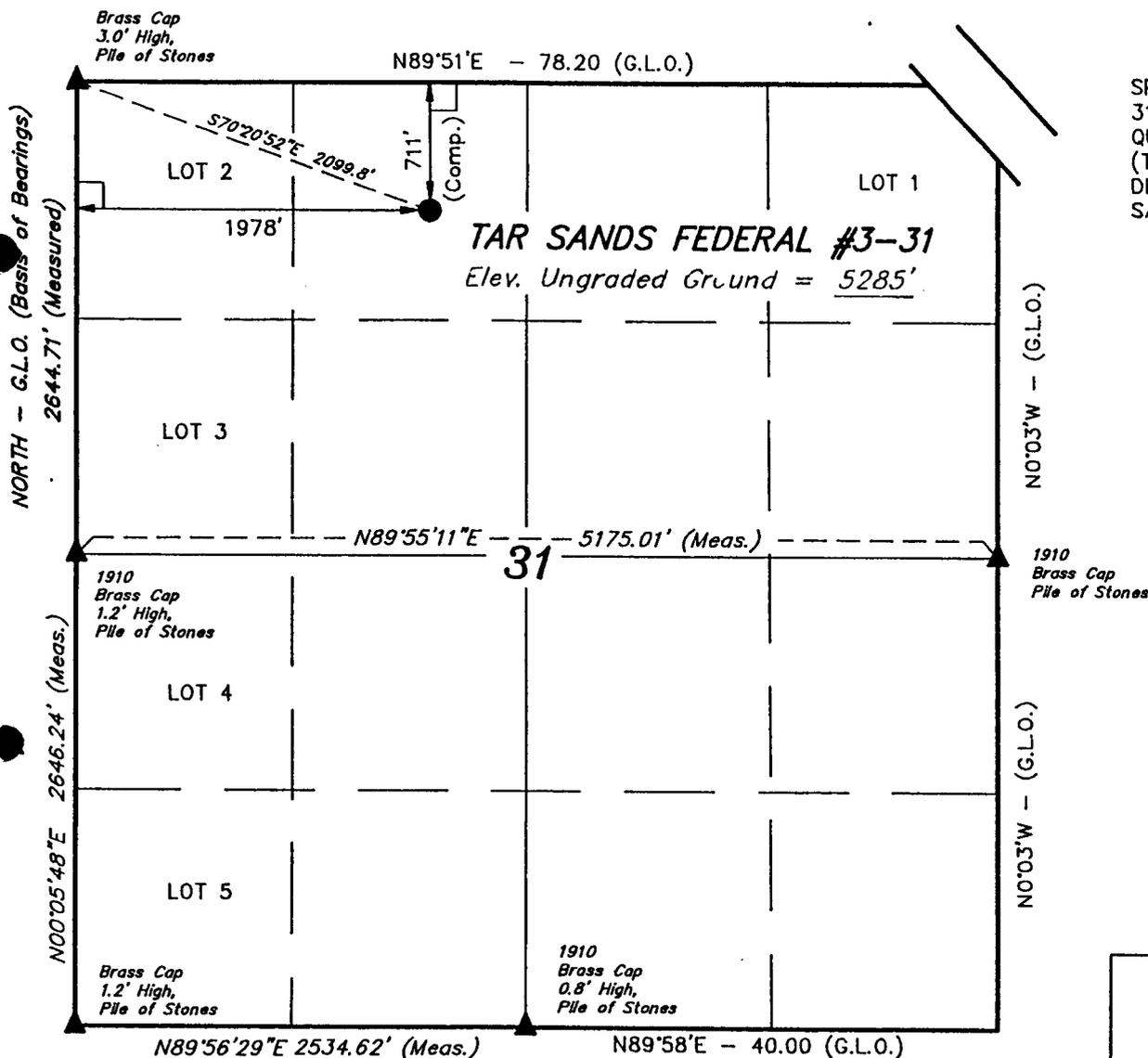
T8S, R17E, S.L.B.&M.

INLAND PRODUCTION CO.

Well location, TAR SANDS FEDERAL #3-31, located as shown in the NE 1/4 NW 1/4 of Section 31, T8S, R17E, S.L.B.&M. Duchesne County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE NORTHWEST CORNER OF SECTION 31, T8S, R17E, S.L.B.&M. TAKEN FROM THE MYTON SE QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5301 FEET.



CERTIFICATE

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.

*Robert L. Gray*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

- LEGEND:
- └─┘ = 90° SYMBOL
  - = PROPOSED WELL HEAD.
  - ▲ = SECTION CORNERS LOCATED.

<b>UNTAH ENGINEERING &amp; LAND SURVEYING</b>		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(801) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 4-15-96	DATE DRAWN: 4-24-96
PARTY G.S. R.E. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE INLAND PRODUCTION CO.	

Attachment A-1

EXHIBIT B

Page 1

Tract	Land Description	Minerals Ownership	Minerals Leased By	Federal or State # & Expires	Surface Grazing Rights Leased By
1	Township 8 South, Range 17 East Section 29: Lot 1 Section 30: Lots 1-14 E/2NE/4, E/2SW/4, SW/4SE/4 Section 31: Lots 1-5, W/2E/2, SE/NE E/2W/2, NE/4SE/4	USA	Inland Production Company	U-74869 HBP	(Surface Rights) USA (Grazing Rights) Elmer & Lee Moon
2	Township 8 South, Range 16 East Section 24: S/2 Section 25: NE/4, E/2NW/4, S/2 Section 26: S/2SE/4	USA	Inland Production Company	U-67170 HBP	(Surface Rights) USA (Grazing Rights) Elmer & Lee Moon
3	Township 8 South, Range 16 East Section 36: All	St. of Utah	Inland Production Company	ML-22061 HBP	(Surface Rights) St. of Utah (Grazing Rights) Elmer & Lee Moon

ATTACHMENT C

CERTIFICATION FOR SURFACE OWNER NOTIFICATION

RE: Application for Approval of Class II Injection Well  
Tar Sands Federal #3-31

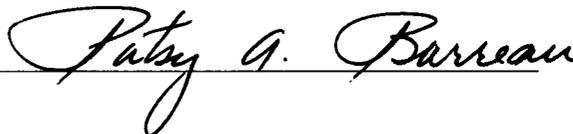
I hereby certify that a copy of the injection application has been provided to all surface owners within a one-half mile radius of the proposed injection well.

Signed: \_\_\_\_\_

  
Inland Production Company  
John E. Dyer  
Chief Operating Officer

Sworn to and subscribed before me this 10<sup>th</sup> day of March, 1998.

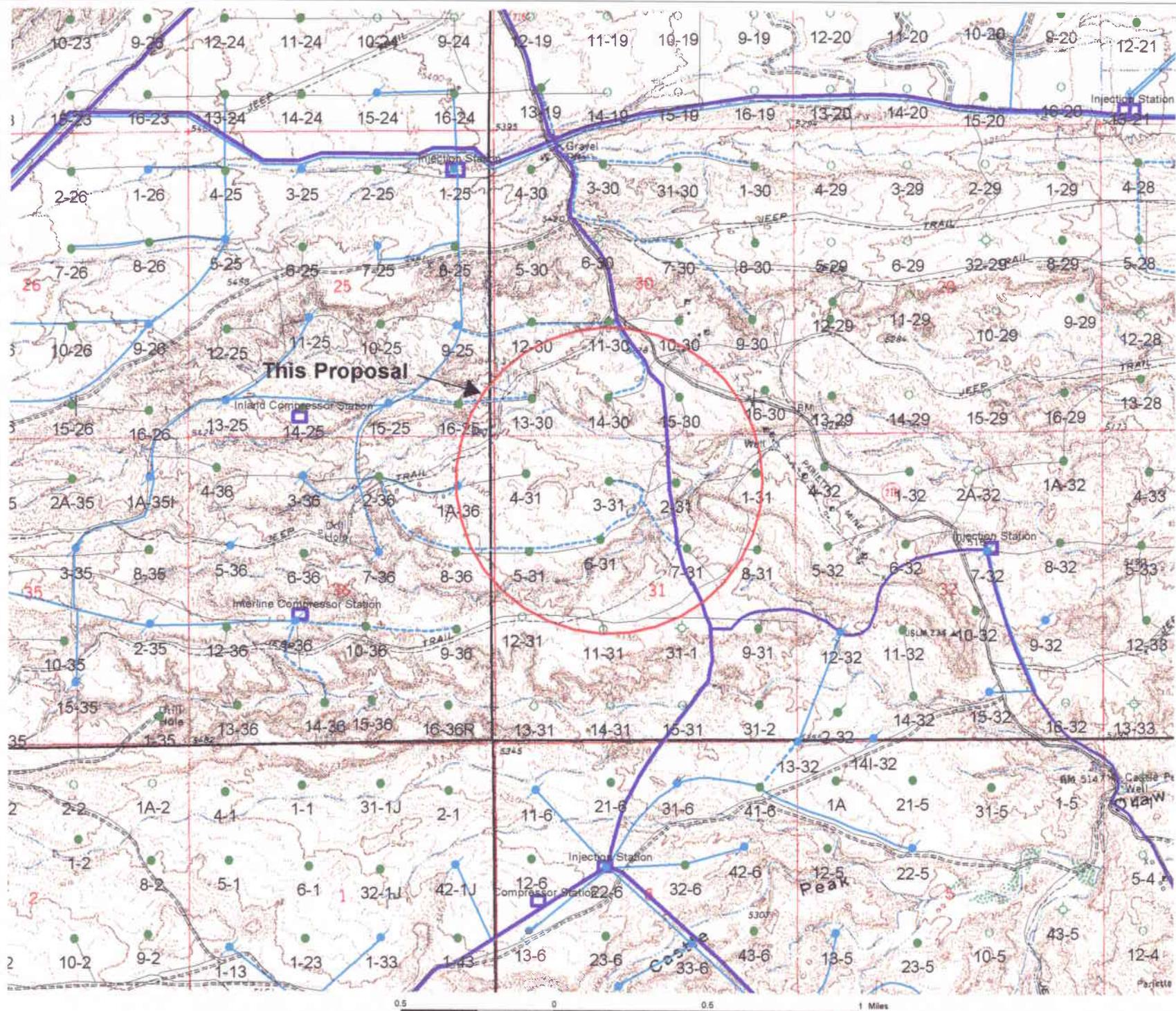
Notary Public in and for the State of Colorado: \_\_\_\_\_





My Commission Expires 11/14/2000

Attachment D



- Legend
- INJ
  - OIL
  - ◇ GAS
  - ★ O&G
  - ◇ DRY
  - SHUTIN
  - LOC
  - Proposed Water 6"
  - Proposed Water 8"
  - Proposed Water 4"
  - Proposed Water 2-3"
  - Proposed Water

**Inland**  
an IPR Group Company  
Form: IPR-001 (12/12)  
Print: 10/10/12

**LIBYA BASIN**  
Durbat & Elshah Crescent, Utah

Doc: 2-1018 4/17

# Tar Sands Federal #3-31

Spud Date: 7/8/97  
 Put on Production: 8/11/97  
 GL: 5283' KB: 5296'

Initial Production: 61 BOPD,  
 133 MCFPD, 7 BWPD

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (296.30')  
 DEPTH LANDED: 294.56'(GL)  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 120 sxs Premium cmt, est 5 bbls cmt to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 144 jts. (6033.86')  
 DEPTH LANDED: 6075.54'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 340 sk HiBond mixed & 320 sxs thixotropic  
 CEMENT TOP AT: 977' per CBL

**TUBING**

SIZE/GRADE/WT.: 2-7/8"/6.5#/M-50 tbg.  
 NO. OF JOINTS: 194 jts.  
 TUBING ANCHOR: 5823'  
 SEATING NIPPLE: 2-7/8" (1.10')  
 TOTAL STRING LENGTH: EOT @ 5985'  
 SN LANDED AT: 5917'

**SUCKER RODS**

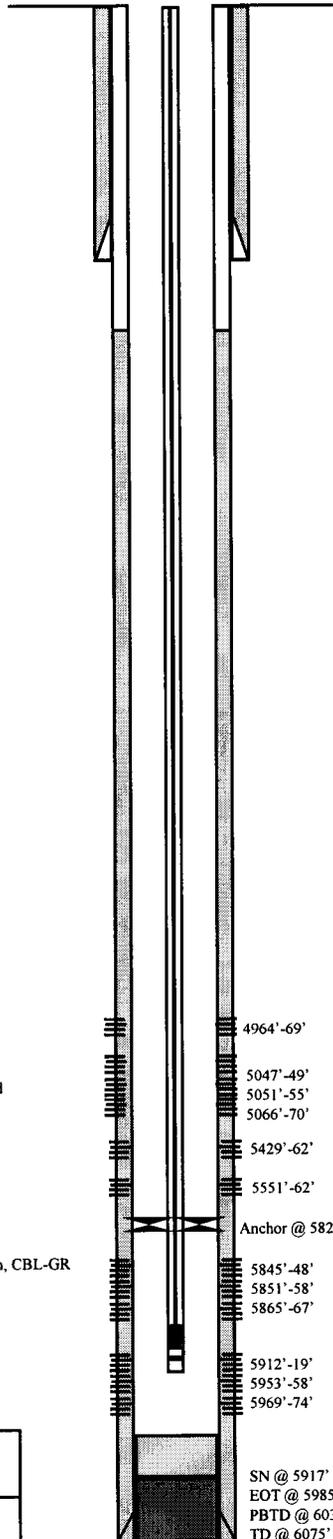
POLISHED ROD: 1-1/2" x 22' polished rod.  
 SUCKER RODS: 4-1" guided, 133-3/4" plain rods, 99-3/4" scraped  
 TOTAL ROD STRING LENGTH: ?  
 PUMP NUMBER: ?  
 PUMP SIZE: 2-1/2 x 1-1/2 x 12 x 15 RHAC pump  
 STROKE LENGTH: 84"  
 PUMP SPEED, SPM: 8 SPM  
 LOGS: Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

**FRAC JOB**

8/2/97 5845'-5974' **Frac CP-2 & CP-4 sands as follows:**  
 109,400# of 20/40 sand in 573 bbls of Boragel. Brokedown @ 2609 psi. Treated @ avg rate of 31.4 w/avg pressure of 1300 psi. ISIP-1912 psi. 5-min 1358 psi. Flowback on 12/64" ck for 2-1/2 hours until dead.

8/5/97 5429'-5562' **Frac A-3 & LODC sands as follows:**  
 106,000# of 20/40 sand in 550 bbls of Boragel. Broke down @ 2630 psi. Treated w/avg press of 1500 psi @ avg rate of 30.5 bpm. ISIP 1851 psi, 5-min 1740 psi, 10-min 1512 psi, 15-min 1443 psi. Start Flowback after 5-min SI @ 1 bpm until dead.

8/7/97 4964'-5070' **Frac C & D-2 sands as follows:**  
 107,100# of 20/40 sand in 510 bbls of Boragel. Breakdown @ 2043 psi. Treated @ avg rate of 27.5 bpm w/avg press of 2270 psi. ISIP-3261 psi, 5-min SI: 3141 psi. Flowback @ 1 bpm until dead.



**PERFORATION RECORD**

Date	Depth Range	Tool	Holes
8/1/97	5845'-5848'	4 JSPF	12 holes
8/1/97	5851'-5858'	4 JSPF	28 holes
8/1/97	5865'-5867'	4 JSPF	8 holes
8/1/97	5912'-5919'	4 JSPF	28 holes
8/1/97	5953'-5958'	4 JSPF	20 holes
8/1/97	5969'-5974'	4 JSPF	20 holes
8/5/97	5429'-5462'	2 JSPF	66 holes
8/5/97	5551'-5562'	4 JSPF	44 holes
8/6/97	4964'-4969'	4 JSPF	20 holes
8/6/97	5047'-5049'	4 JSPF	32 holes
8/6/97	5051'-5055'	4 JSPF	16 holes
8/6/97	5066'-5070'	4 JSPF	16 holes



**Inland Resources Inc.**

**Tar Sands Federal #3-31**

771 FNL 1978 FWL  
 NENW Section 31-T8S-R17E  
 Duchesne Co, Utah  
 API #43-013-31733; Lease #U-74869

# Tar Sands Federal #13-30

Spud Date: 6/29/96  
 Put on Production: 7/30/96  
 GL: 5282' KB: 5295'

Initial Production: 32 BOPD,  
 68 MCFPD, 2 BWPD

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (290.48')  
 DEPTH LANDED: 289.38'(GL)  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 120 sxs Premium cmt, est 4 bbls cmt to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 144 jts. (6146.77')  
 DEPTH LANDED: 6140.77'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 320 sk Hybond mixed & 340 sxs thixotropic  
 CEMENT TOP AT: Surface per CBL

**TUBING**

SIZE/GRADE/WT.: 2-7/8"/6.5#/LS tbg.  
 NO. OF JOINTS: 202 jts.  
 TUBING ANCHOR: 5706'  
 SEATING NIPPLE: 2-7/8" (1.10')  
 TOTAL STRING LENGTH: EOT @ 5809'  
 SN LANDED AT: 5739'

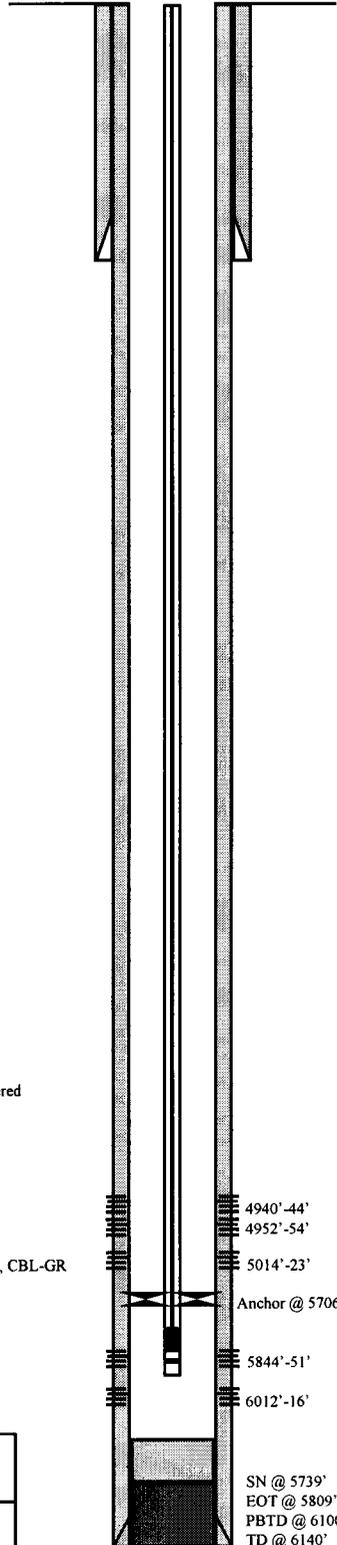
**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' polished rod.  
 SUCKER RODS: 4- 1" scraped, 123-3/4" plain rods, 98-3/4" scraped  
 TOTAL ROD STRING LENGTH: ?  
 PUMP NUMBER: ?  
 PUMP SIZE: 1-1/2" pump  
 STROKE LENGTH: 74"  
 PUMP SPEED, SPM: 9 SPM  
 LOGS: Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

**FRAC JOB**

7/17/96 5844'-6016' **Frac CP-1 and CP-4 sands as follows:**  
 83,900# of 20/40 sand in 486 bbls of Boragel. Breakdown @ 2763 psi, treated @ avg rate of 28 bpm w/ avg press of 2000psi. ISIP-2497 psi, 5-min 2170 psi. Flowback on 16/64" ck for 2-1/2 hrs & died.

7/20/96 4940'-5023' **Frac D-1 and D-2 sand as follows:**  
 87,100# of 20/40 sd in 470 bbls of Boragel. Breakdown @ 2640 psi. Treated @ avg rate of 26.4 bpm w/avg press of 2400 psi. ISIP-2938 psi, 5-min 2881 psi. Flowback on 16/64" ck for 2-1/2 hrs and died.



**PERFORATION RECORD**

7/17/96	5844'-5457'	4 JSPF	28 holes
7/17/96	6012'-6016'	4 JSPF	16 holes
7/18/96	4940'-4944'	4 JSPF	16 holes
7/18/96	4952'-4954'	4 JSPF	8 holes
7/18/96	5014'-5023'	4 JSPF	36 holes



**Inland Resources Inc.**

**Tar Sands Federal #13-30**

602.6 FSL 698.9 FWL

SWSW Section 30-T8S-R17E

Duchesne Co, Utah

API #43-013-31637; Lease #U-74869

# Tar Sands Federal #14-30

Spud Date: 12/13/96  
Put on Production: --/--/--  
GL: 5300' KB: 5313'

Initial Production: ? BOPD, ?  
MCFPD, ? BWPD

Wellbore Diagram

SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (293.58')  
DEPTH LANDED: 292.78' GL  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 120 sxs Premium cmt, est 2 bbls to surf.

PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 145 jts. (?)  
DEPTH LANDED: 6100'  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 340 sk Hibond mixed & 320 sxs thixotropic  
CEMENT TOP AT: 902' per CBL

TUBING

SIZE/GRADE/WT.:  
NO. OF JOINTS: Waiting On Completion  
TUBING ANCHOR:  
SEATING NIPPLE:  
TOTAL STRING LENGTH:  
SN LANDED AT:

SUCKER RODS

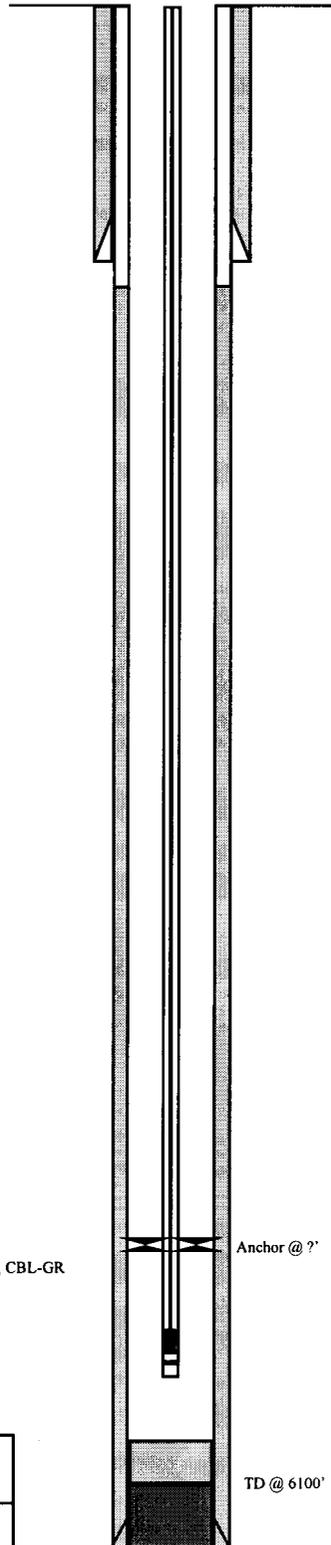
POLISHED ROD:  
SUCKER RODS:  
TOTAL ROD STRING LENGTH:  
PUMP NUMBER:  
PUMP SIZE:  
STROKE LENGTH:  
PUMP SPEED, SPM:  
LOGS: Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

FRAC JOB

Waiting on Completion 1/8/97

PERFORATION RECORD

Waiting On Completion



	<b>Inland Resources Inc.</b>
	<b>Tar Sands Federal #14-30</b>
	755 FSL 1930 FWL
	NENW Section 30-T8S-R17E
	Duchesne Co, Utah
API #43-013-31711; Lease #U-74869	

# Tar Sands Federal #15-30

Spud Date: 7/11/97  
 Put on Production: 8/20/97  
 GL: 5284' KB: 5296'

Initial Production: 82 BOPD,  
 84 MCFPD, 14 BWPD

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (285.29')  
 DEPTH LANDED: 283.60' GL  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 120 sxs Premium cmt, est 4 bbls to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 143 jts. (6016.44')  
 DEPTH LANDED: 6032.80' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 445 sxs Hibond mixed & 360 sxs thixotropic  
 CEMENT TOP AT: 1000' per CBL

**TUBING**

SIZE/GRADE/WT.: 2-7/8" / M -50 / 6.5#  
 NO. OF JOINTS: 189 jts  
 TUBING ANCHOR: 5759'  
 SEATING NIPPLE: 5-1/2" (1.10')  
 TOTAL STRING LENGTH: ? (EOT @ 5913')  
 SN LANDED AT: 5821'

**SUCKER RODS**

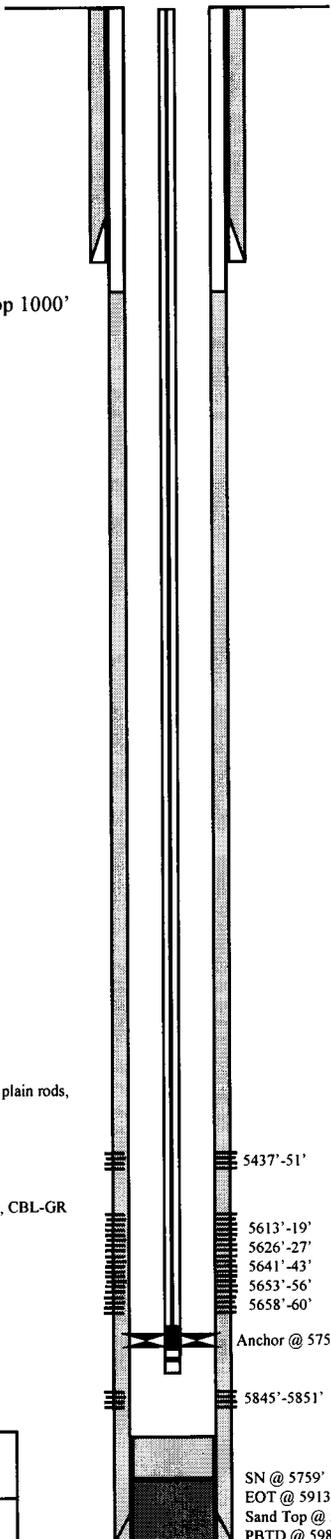
POLISHED ROD: 1-1/2" x 22' SM  
 SUCKER RODS: 98-3/4" scraped, 4 - 1-1/2" guided rods, 121-3/4" plain rods,  
 PUMP SIZE: 2-1/2" x 1-1/2" x 15 RHAC rod pump  
 STROKE LENGTH: 64"  
 PUMP SPEED, SPM: 8 - 1/2 SPM  
 LOGS: Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

**FRAC JOB**

8/14/97 5613'-5851' **Frac LDC/CP sand as follows:**  
 135,900# of 20/40 sand in 644 bbls of Boragel. Breakdown @ 2526 psi.  
 Treated @ avg rate of 36.3 bpm w/avg press of 1900 psi. ISIP-2101 psi, 5-min 1946 psi. Flowback on 12/64" ck for 5 - 1/2 hours and died.

8/16/97 5437'-5451' **Frac A sands as follows:**  
 106,600# of 20/40 sand in 556 bbls of # Boragel. Breakdown @ 3278 psi.  
 Treated @ avg rate of 25.3 bpm w/avg press of 2012 psi. ISIP-2501 psi, 5-min 2411 psi. Flowback on 12/64" ck for 3 - 1/2 hours and died.

Cement Top 1000'



**PERFORATION RECORD**

8/14/97	5845'-5851'	4 JSPF	24 holes
8/14/97	5658'-5660'	4 JSPF	8 holes
8/14/97	5653'-5656'	4 JSPF	12 holes
8/14/97	5641'-5643'	4 JSPF	8 holes
8/14/97	5626'-5627'	4 JSPF	4 holes
8/14/97	5613'-5619'	4 JSPF	24 holes
8/16/97	5437'-5451'	4 JSPF	56 holes



**Inland Resources Inc.**

**Tar Sands Federal #15-30**

1980 FEL 660 FSL  
 NENE Section 2-T8S-R17E  
 Duchesne Co, Utah  
 API #43-013-31874; Lease #U-74869

# Monument Butte State #1A-36

Spud Date: 4/9/96  
 Put on Production: 5/30/96  
 GL: 5332' KB: 5345'

Initial Production: 150 BOPD  
 est.

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 290'  
 DEPTH LANDED: 289.07'(GL)  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 120 sxs Premium cmt, est 5 bbls to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 145 jts. (6182.72')  
 DEPTH LANDED: 6179.72.03'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 290 sk Hyfill mixed & 360 sxs thixotropic  
 CEMENT TOP AT: Surface per CBL

**TUBING**

SIZE/GRADE/WT.: 2-7/8" / M-50 / 6.5#  
 NO. OF JOINTS: 197 jts  
 TUBING ANCHOR: 5808'  
 SEATING NIPPLE: 2-7/8" (1.10')  
 TOTAL STRING LENGTH: ? (EOT @ 6024')  
 SN LANDED AT: 5841'

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' SM  
 SUCKER RODS: 4-3/4" scraped, 128-3/4" plain rods, 97-3/4" scraped  
 TOTAL ROD STRING LENGTH: ?  
 PUMP SIZE: 2-1/2" x 1-1/2" x 15' RHAC  
 STROKE LENGTH: 74"  
 PUMP SPEED, SPM: 7 SPM  
 LOGS: Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

**FRAC JOB**

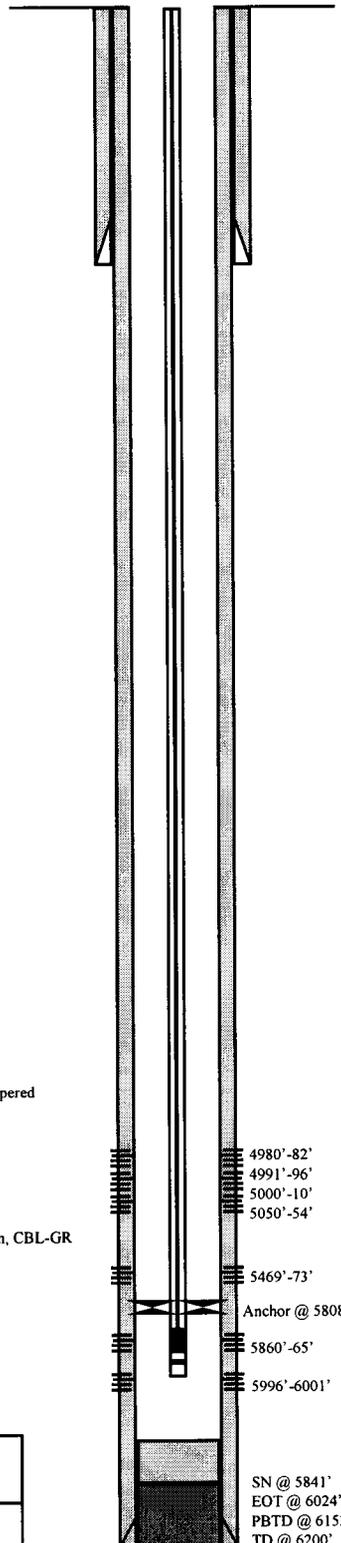
5/20/96 5860'-6001' **Frac CP-2 and CP-4 sands as follows:**  
 62,400# of 20/40 sd in 419 bbls of Boragel. Breakdown @ 2950 treated @ avg rate of 30 bpm, avg press 1950 psi. ISIP-2153 psi, 5-min 1942 psi. Flowback after 5 min on 16/64" ck.

5/22/96 5469'-5473' **Frac A-3 sand as follows:**  
 61,500# of 20/40 sd in 409 bbls Boragel. Breakdown @ 3148# treated @ avg rate of 24.5, avg press 2300#. ISIP-2346 psi, 5-min 2249 psi. Flowback after 5 min on 16/64" ck @ 1.8 bpm.

5/24/96 4980'-5054' **Frac D-2 & D-3 sands as follows:**  
 76,500# of 20/40 sd in 425 bbls of Boragel. Breakdown @ 1950# treated @ avg rate pf 25 bpm, avg press 1800#. ISIP-3516 psi, 5-min 2953 psi. Flowback on 16/64" ck @ 1.7 bpm.

**PERFORATION RECORD**

5/18/96	5860'-5865'	2 JSPF	10 holes
5/18/96	5996'-6001'	4 JSPF	20 holes
5/21/96	5469'-5473'	4 JSPF	16 holes
5/23/96	4980'-4982'	4 JSPF	8 holes
5/23/96	4991'-4996'	4 JSPF	20 holes
5/23/96	5000'-5010'	4 JSPF	40 holes
5/23/96	5050'-5054'	4 JSPF	16 holes





**Inland Resources Inc.**

**Monument Butte State #1A-36**

854 FNL 621 FEL  
 NENE Section 36-T8S-R16E  
 Duchesne Co, Utah  
 API #43-013-31599; Lease #ML-22061

# Tar Sands Federal #4-31

Spud Date: 7/27/96  
 Put on Production: 8/26/96  
 GL: 5312' KB: 5325'

Initial Production: 45 BOPD,  
 45 MCFPD, 3 BWPD

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (291.13')  
 DEPTH LANDED: 289.53'(GL)  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 120 sxs Premium cmt, est 5 bbls cmt to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 155 jts. (6224.10')  
 DEPTH LANDED: 6222.10'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 330 sk Hybond mixed & 370 sxs thixotropic  
 CEMENT TOP AT: Surface per CBL

**TUBING**

SIZE/GRADE/WT.: 2-7/8"/6.5#/LS tbg.  
 NO. OF JOINTS: 197 jts.  
 TUBING ANCHOR: 5519'  
 SEATING NIPPLE: 2-7/8" (1.10')  
 TOTAL STRING LENGTH: EOT @ 5681'  
 SN LANDED AT: 5554'

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' polished rod.  
 SUCKER RODS: 8- 1" scraped, 114-3/4" plain rods, 99-3/4" scraped  
 TOTAL ROD STRING LENGTH: ?  
 PUMP NUMBER: ?  
 PUMP SIZE: 2-1/2 x 1-1/2 z 12 x 15 RHAC pump  
 STROKE LENGTH: 86"  
 PUMP SPEED, SPM: 7 SPM  
 LOGS: Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

**FRAC JOB**

**8/14/96 5570'-5582'** **Frac LDC sand as follows:**  
 87,700# 20/40 sand in 484 bbls of Boragel. Breakdown @ 2889 psi. Treated @ avg rate of 20 bpm w/avg press of 200 psi. ISIP-2339 psi, 5-min 2161 psi. Flowback on 12/64" ck. for 2-1/2 hrs & died.

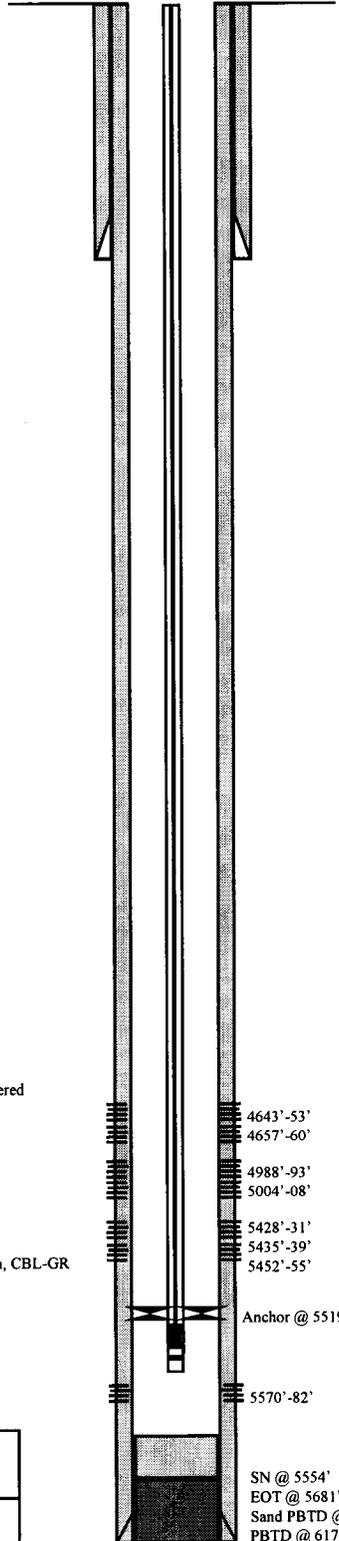
**8/16/96 5428'-5455'** **Frac A-3 sand as follows:**  
 86,700# of 20/40 sand in 478 bbls of Boragel. Breakdown @ 2200 psi. Treated @ avg rate of 18.3 bpm w/avg press of 2050 psi. ISIP-3007 psi, 5-min 2832 psi. Flowback on 12/64" ck. for 3 hrs and died.

**8/19/96 4988'-5008'** **Frac D-2 sand as follows:**  
 86,500# of 20/40 sand in 475 bbls of Boragel. Breakdown @ 2734 psi. Treated @ avg rate of 18 bpm w/avg press of 2200 psi. ISIP-2793 psi, 5-min 2749 psi. Flowback on 12/64" ck. for 1-1/2 hrs and died.

**8/21/96 4643'-4660'** **Frac PB-10 sand as follows:**  
 99,400# of 20/40 sand in 546 bbls of Boragel. Breakdown @ 3615 psi. Treated @ avg rate of 22.2 bpm w/avg press of 2600 psi. ISIP-3453 psi, 5-min 3188 psi. Flowback on 12/64" ck. for 3-1/2 hrs and died.

**PERFORATION RECORD**

Date	Interval	Tool	Holes
8/13/96	5570'-5582'	4 JSPF	48 holes
8/15/96	5428'-5431'	4 JSPF	12 holes
8/15/96	5435'-5439'	4 JSPF	16 holes
8/15/96	5452'-5455'	4 JSPF	12 holes
8/17/96	4988'-4993'	4 JSPF	20 holes
8/17/96	5004'-5008'	4 JSPF	16 holes
8/20/96	4643'-4653'	4 JSPF	40 holes
8/20/96	4657'-4660'	4 JSPF	12 holes





**Inland Resources Inc.**

**Tar Sands Federal #4-31**

549 FWL 635 FNL

NWNW Section 31-T8S-R17E

Duchesne Co, Utah

API #43-013-31606; Lease #U-74869

# Tar Sands Federal #2-31

Spud Date: 6/11/97  
 Put on Production: 7/31/97  
 GL: 5262' KB: 5275'

Initial Production: 130 BOPD,  
 164 MCFPD, 6 BWPD

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (302.54')  
 DEPTH LANDED: 300.05' GL  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 155 sxs Premium cmt, est 8 bbls to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 145 jts. (6046.34')  
 DEPTH LANDED: 6024.81' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 350 sxs Hibond mixed & 270 sxs thixotropic  
 CEMENT TOP AT: NA per CBL

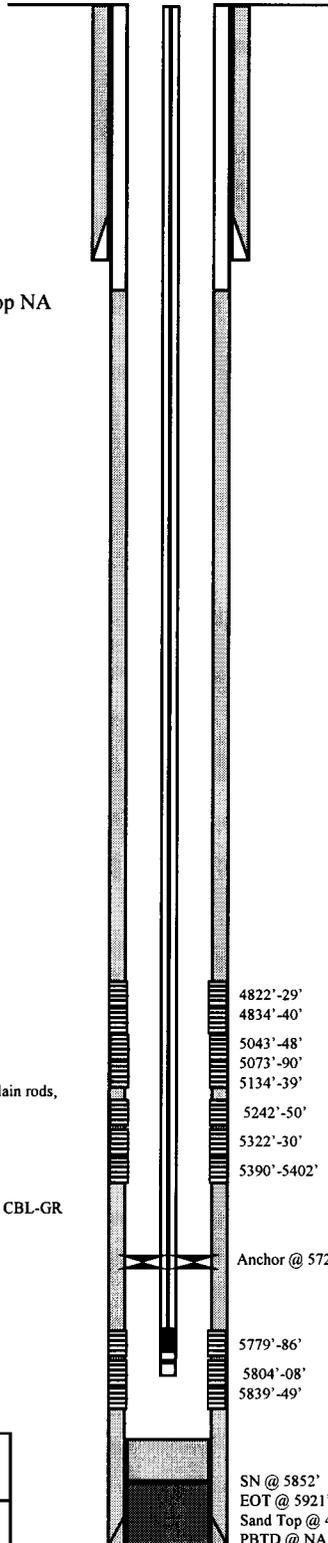
**TUBING**

SIZE/GRADE/WT.: 2-7/8" / M -50 / 6.5#  
 NO. OF JOINTS: 179 jts  
 TUBING ANCHOR: 5725'  
 SEATING NIPPLE: 5-1/2" (1.10')  
 TOTAL STRING LENGTH: ? (EOT @ 5921')  
 SN LANDED AT: 5852'

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' SM  
 SUCKER RODS: 94-3/4" scraped, 4-1-1/2" guided rods, 130-3/4" plain rods,  
 PUMP SIZE: 2-1/2" x 1-1/2" x 15 RHAC rod pump  
 STROKE LENGTH: 64"  
 PUMP SPEED, SPM: 8 SPM  
 LOGS: Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

Cement Top NA



**FRAC JOB**

7/22/97 5783'-5850' **Frac CP sand as follows:**  
 96,200# of 20/40 sand in 506 bbls of Boragel. Breakdown @ 2121 psi.  
 Treated @ avg rate of 26.3 bpm w/avg press of 1760 psi. ISIP-1972 psi, 5-min 1878 psi. Flowback on 12/64" ck for 4 hours and died.

7/25/97 5347'-5536' **Frac A sands as follows:**  
 154,300# of 20/40 sand in 708 bbls of # Boragel. Breakdown @ 2212 psi.  
 Treated @ avg rate of 40.5 bpm w/avg press of 2000 psi. ISIP-2115 psi, 5-min 1892 psi. Flowback on 12/64" ck for 4 - 1/2 hours and died.

7/27/97 4890'-5058' **Frac D/C sands as follows:**  
 151,800# of 20/40 sand in 692 bbls of # Boragel. Breakdown @ 2116 psi.  
 Treated @ avg rate of 33.3 bpm w/avg press of 2350 psi. ISIP-2654 psi, 5-min 2559 psi. Flowback on 12/64" ck for 4 hours and died.

**PERFORATION RECORD**

Date	Depth Range	Tool	Holes
7/22/97	5839'-5849'	4 JSPF	40 holes
7/22/97	5804'-5808'	4 JSPF	16 holes
7/22/97	5779'-5786'	4 JSPF	28 holes
7/22/97	5390'-5402'	4 JSPF	44 holes
7/22/97	5322'-5330'	4 JSPF	32 holes
8/7/97	5242'-5250'	4 JSPF	32 holes
8/9/97	5134'-5139'	4 JSPF	20 holes
8/9/97	5073'-5090'	4 JSPF	64 holes
8/9/97	5043'-5048'	4 JSPF	20 holes
8/12/97	4834'-4840'	4 JSPF	24 holes
8/12/97	4822'-4829'	4 JSPF	28 holes

4822'-29'  
 4834'-40'  
 5043'-48'  
 5073'-90'  
 5134'-39'  
 5242'-50'  
 5322'-30'  
 5390'-5402'  
 Anchor @ 5725'  
 5779'-86'  
 5804'-08'  
 5839'-49'

SN @ 5852'  
 EOT @ 5921'  
 Sand Top @ 4822'  
 PBTB @ NA  
 TD @ 6025'



**Inland Resources Inc.**

**Tar Sands Federal #2-31**

2048 FEL 814 FNL  
 NENE Section 31-T8S-R17E  
 Duchesne Co, Utah  
 API #43-013-31866; Lease #U-74869

# Tar Sands Federal #1-31

Spud Date: 10/4/96  
 Put on Production: 10/28/96  
 GL: 5250' KB: 5263'

Initial Production: 147 BOPD,  
 170 MCFPD, 5 BWPD

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts (284.88')  
 DEPTH LANDED: 284.68' GL  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 120 sxs Type V cmt, est 9 bbls to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 100 jts. (6047.84')  
 DEPTH LANDED: 6033.34' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 390 sk Hibond mixed & 350 sxs thixotropic  
 CEMENT TOP AT: 638' per CBL

**TUBING**

SIZE/GRADE/WT.: 2-7/8" / LS / 6.5#  
 NO. OF JOINTS: 193 jts  
 TUBING ANCHOR: 5222'  
 SEATING NIPPLE: 2-7/8" (1.10')  
 TOTAL STRING LENGTH: ? (EOT @ 5726')  
 SN LANDED AT: 5443'

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' SM  
 SUCKER RODS: 8-1" scraped, 4-3/4" guided rods, 110-3/4" plain rods, 95-3/4" scraped  
 PUMP SIZE: 2-1/2" x 1-1/2" x 12 x 15 RHAC rod pump  
 STROKE LENGTH: 86"  
 PUMP SPEED, SPM: 7 SPM  
 LOGS Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

**FRAC JOB**

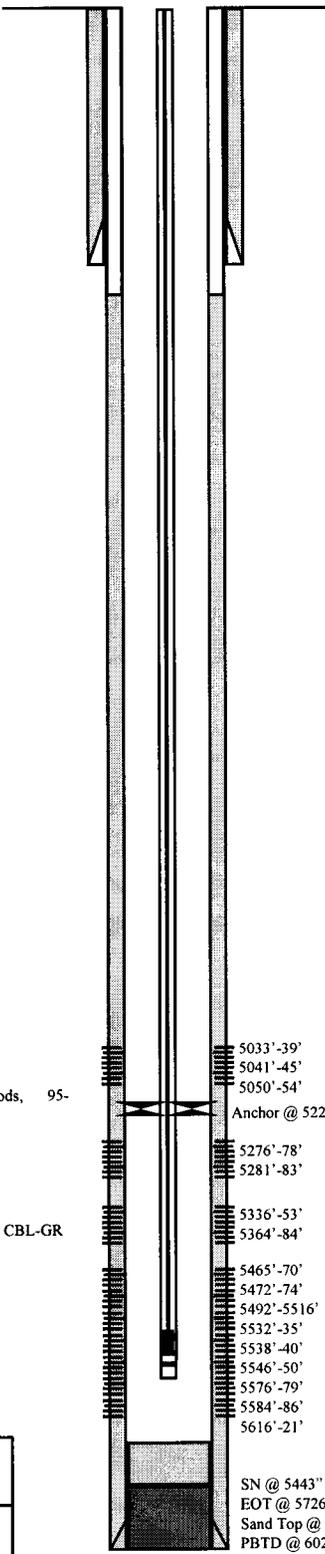
**10/18/96 5465'-5621'** **Frac LDC sand as follows:**  
 119,800# of 20/40 sand in 642 bbls of Delta Frac fluid. Breakdown @ 2830 psi. Treated @ avg rate of 40 bpm w/avg press of 1700 psi. ISIP-1661 psi, 5-min 1507 psi. Flowback on 12/64" ck for 1-1/2 hours and died.

**10/21/96 5276'-5384'** **Frac A-1 & A-3 sands as follows:**  
 103,700# of 20/40 sand in 525 bbls of Delta Frac fluid. Breakdown @ 2200 psi. Treated @ avg rate of 30.7 bpm w/avg press of 1600 psi. ISIP-1941 psi, 5-min 1573 psi. Flowback on 12/64" ck for 1-1/2 hours and died.

**10/23/96 5033'-5054'** **Frac C sand as follows:**  
 92,800# of 20/40 sand in 480 bbls of Delta Frac fluid. Breakdown @ 1510 psi. Treated @ avg rate of 21 bpm w/avg press of 1600 psi. ISIP-3916 psi, 5-min 2623 psi. Flowback on 12/64" ck for 2 hours and died.

**PERFORATION RECORD**

10/18/96	5465'-5470'	2 JSPF	10 holes
10/18/96	5472'-5474'	2 JSPF	4 holes
10/18/96	5492'-5516'	2 JSPF	48 holes
10/18/96	5532'-5535'	2 JSPF	6 holes
10/18/96	5538'-5540'	2 JSPF	4 holes
10/18/96	5546'-5550'	2 JSPF	8 holes
10/18/96	5576'-5579'	2 JSPF	6 holes
10/18/96	5584'-5586'	2 JSPF	4 holes
10/18/96	5616'-5621'	2 JSPF	10 holes
10/19/96	5276'-5278'	4 JSPF	4 holes
10/19/96	5281'-5283'	4 JSPF	8 holes
10/19/96	5336'-5353'	2 JSPF	34 holes
10/19/96	5364'-5384'	2 JSPF	38 holes
10/22/96	5033'-5039'	4 JSPF	24 holes
10/22/96	5041'-5045'	4 JSPF	16 holes
10/22/96	5050'-5054'	4 JSPF	16 holes



SN @ 5443'  
 EOT @ 5726'  
 Sand Top @ 6008'  
 PBTD @ 6022'  
 TD @ 6380'



**Inland Resources Inc.**

**Tar Sands Federal #1-31**

639 FEL 706 FNL  
 NENE Section 31-T8S-R17E  
 Duchesne Co, Utah  
 API #43-013-31654; Lease #U-74870

# Tar Sands Federal #5-31

Spud Date: 6/9/97  
 Put on Production: 7/21/97  
 GL: 5336' KB: 5348'

Initial Production: 121 BOPD,  
 128 MCFPD, 7 BWPD

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (304.93')  
 DEPTH LANDED: 303.04' GL  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 120 sxs Premium cmt, est 6 bbls to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 143 jts. (6102.52')  
 DEPTH LANDED: 6096.52' KB  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 405 sxs Hibond mixed & 360 sxs thixotropic  
 CEMENT TOP AT: NA per CBL

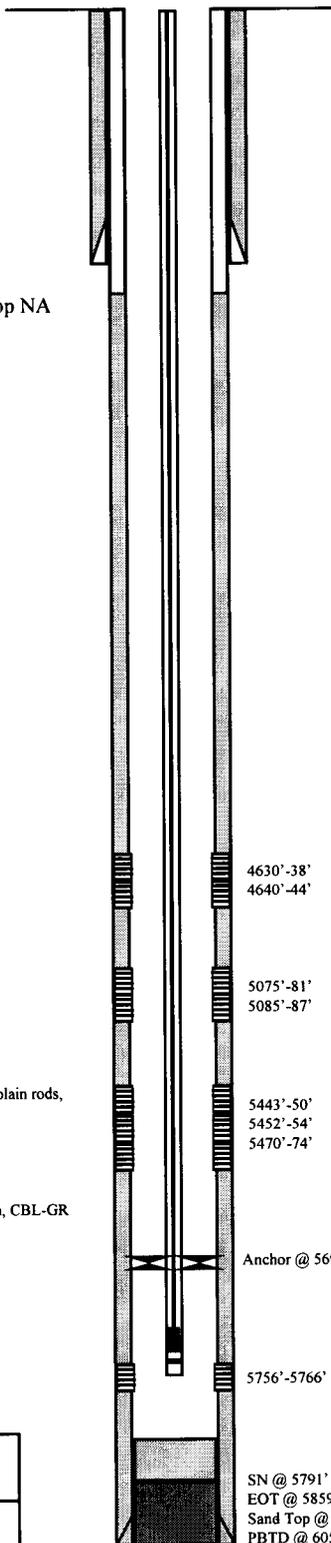
**TUBING**

SIZE/GRADE/WT.: 2-7/8" / M -50 / 6.5#  
 NO. OF JOINTS: 183 jts  
 TUBING ANCHOR: 5695'  
 SEATING NIPPLE: 2 - 7/8" (1.10')  
 TOTAL STRING LENGTH: ? (EOT @ 5859')  
 SN LANDED AT: 5791'

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' SM  
 SUCKER RODS: 99-3/4" scraped, 4-1-1/2" guided rods, 122-3/4" plain rods,  
 PUMP SIZE: 2-1/2" x 1-1/2" x 15 RHAC rod pump  
 STROKE LENGTH: 86"  
 PUMP SPEED, SPM: 8 SPM  
 LOGS: Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

Cement Top NA



**FRAC JOB**

7/8/97 5756'-5766' **Frac CP sand as follows:**  
 93,500# of 20/40 sand in 508 bbls of Boragel. Breakdown @ 3680psi. Treated @ avg rate of 26.5 bpm w/avg press of 2250 psi. ISIP-2353 psi, 5-min 2166 psi. Flowback on 12/64" ck for 3 hours and died.

7/10/97 5443'-5474' **Frac A sand as follows:**  
 80,800# of 20/40 sand in 451 bbls of Boragel. Breakdown @ 2648psi. Treated @ avg rate of 24.7 bpm w/avg press of 1750 psi. ISIP-2143 psi, 5-min 1752 psi. Flowback on 12/64" ck for 3 hours and died.

7/12/97 5075'-5087' **Frac C sand as follows:**  
 90,300# of 20/40 sand in 4662 bbls of Boragel. Breakdown @ 2453psi. Treated @ avg rate of 27 bpm w/avg press of 2400 psi. ISIP-3264 psi, 5-min 2933 psi. Flowback on 12/64" ck for 3-1/2 hours and died.

7/15/97 4630'-4644' **Frac PB sand as follows:**  
 72,500# of 20/40 sand in 396 bbls of Boragel. Breakdown @ 2974psi. Treated @ avg rate of 22.5 bpm w/avg press of 2250 psi. ISIP-3553 psi, 5-min 3429 psi. Flowback on 12/64" ck for 3 hours and died.

**PERFORATION RECORD**

Date	Interval	Tool	Holes
7/8/97	5756'-5766'	4 JSPF	40 holes
7/10/97	5470'-5474'	4 JSPF	16 holes
7/10/97	5452'-5454'	4 JSPF	8 holes
7/10/97	5443'-5450'	4 JSPF	28 holes
7/12/97	5085'-5087'	4 JSPF	8 holes
7/12/97	5075'-5081'	4 JSPF	24 holes
7/15/97	4640'-4644'	4 JSPF	16 holes
7/15/97	4630'-4638'	4 JSPF	32 holes



**Inland Resources Inc.**

**Tar Sands Federal #5-31**

660 FWL 1980 FNL  
 NENE Section 31-T8S-R17E  
 Duchesne Co, Utah  
 API #43-013-31607; Lease #U-74869

# Tar Sands Federal #6-31

Spud Date: 7/7/97  
Put on Production: 8/16/97  
GL: 5313' KB: 5325'

Initial Production: 111 BOPD,  
250 MCFPD, 10 BWPD

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (301.25')  
DEPTH LANDED: 299.8' GL  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 120 sxs Premium cmt, est 5 bbls to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 145 jts. (6122.33')  
DEPTH LANDED: 6117' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 425 sxs Hibond mixed & 380 sxs thixotropic  
CEMENT TOP AT: NA per CBL

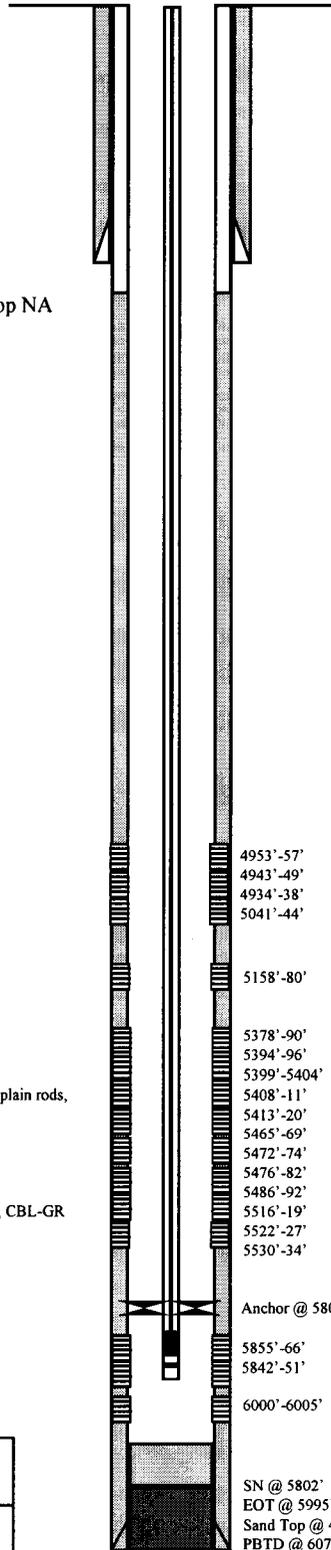
**TUBING**

SIZE/GRADE/WT.: 2-7/8" / M -50 / 6.5#  
NO. OF JOINTS: 187 jts  
TUBING ANCHOR: 5802'  
SEATING NIPPLE: 5-1/2" (1.10')  
TOTAL STRING LENGTH: ? (EOT @ 5995')  
SN LANDED AT: 5927'

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' SM  
SUCKER RODS: 97-3/4" scraped, 4 - 1-1/2" guided rods, 135-3/4" plain rods,  
PUMP SIZE: 2-1/2" x 1-1/2" x 15 RHAC rod pump  
STROKE LENGTH: 72"  
PUMP SPEED, SPM: 8 SPM  
LOGS: Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

Cement Top NA



**FRAC JOB**

- 8/4/97 5842'-6005' **Frac CP sand as follows:**  
1590# of 20/40 sand in 308 bbls of Boragel. Breakdown @ 2078 psi. Treated @ avg rate of 22.0 bpm w/avg press of 1750 psi. ISIP-1697 psi, 5-min 1495 psi. Flowback on 12/64" ck for 5 hours and died.
- 8/6/97 5842'-6005' **Refrac CP sand as follows:**  
119,300# of 20/40 sand in 594 bbls of Boragel. Breakdown @ 2302 psi. Treated @ avg rate of 26.80 bpm w/avg press of 1560 psi. ISIP-2031 psi, 5-min 1922 psi. Flowback on 12/64" ck for 5 hours and died.
- 8/7/97 5378'-5534' **Frac A/LDC sands as follows:**  
166,400# of 20/40 sand in 746 bbls of # Boragel. Breakdown @ 2520 psi. Treated @ avg rate of 43.3 bpm w/avg press of 1700 psi. ISIP-1626 psi, 5-min 1545 psi. Flowback on 12/64" ck for 5 hours and died.
- 8/9/97 5158'-5180' **Frac B sands as follows:**  
125,400# of 20/40 sand in 583 bbls of # Boragel. Breakdown @ 3209 psi. Treated @ avg rate of 25.0 bpm w/avg press of 1600 psi. ISIP-2401 psi, 5-min 2338 psi. Flowback on 12/64" ck for 5 hours and died.
- 8/12/97 4934'-5044' **Frac D sands as follows:**  
106,100# of 20/40 sand in 527 bbls of # Boragel. Breakdown @ 2420 psi. Treated @ avg rate of 26.6 bpm w/avg press of 1900 psi. ISIP-3264 psi, 5-min 3220 psi. Flowback on 12/64" ck for 3 hours and died.

**PERFORATION RECORD**

Date	Interval	Tool	Holes
8/4/97	6000'-6005'	4 JSPF	20 holes
8/4/97	5855'-5866'	4 JSPF	44 holes
8/4/97	5842'-5851'	4 JSPF	44 holes
8/7/97	5530'-5534'	4 JSPF	8 holes
8/7/97	5522'-5527'	4 JSPF	10 holes
8/7/97	5516'-5519'	4 JSPF	6 holes
8/7/97	5486'-5492'	4 JSPF	12 holes
8/7/97	5476'-5482'	4 JSPF	12 holes
8/7/97	5472'-5474'	4 JSPF	4 holes
8/7/97	5465'-5469'	4 JSPF	8 holes
8/7/97	5413'-5420'	4 JSPF	14 holes
8/7/97	5408'-5411'	4 JSPF	6 holes
8/7/97	5399'-5404'	4 JSPF	10 holes
8/7/97	5394'-5396'	4 JSPF	4 holes
8/7/97	5378'-5390'	4 JSPF	24 holes
8/9/97	5158'-5180'	4 JSPF	80 holes
8/12/97	5041'-5044'	4 JSPF	12 holes
8/12/97	4953'-4957'	4 JSPF	16 holes
8/12/97	4943'-4949'	4 JSPF	24 holes
8/12/97	4934'-4938'	4 JSPF	16 holes



**Inland Resources Inc.**

**Tar Sands Federal #6-31**

1825 FWL 1785 FNL  
NENE Section 31-T8S-R17E.  
Duchesne Co, Utah  
API #43-013-31874; Lease #U-74869

SN @ 5802'  
EOT @ 5995'  
Sand Top @ 4934'  
PSTD @ 6079'  
TD @ 6120'

# Tar Sands Federal #7-31

Spud Date: 7/2/97  
 Put on Production: 7/31/97  
 GL: 5298' KB: 5310'

Initial Production: 247 BOPD,  
 240 MCFPD, 16 BWPD

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (302.65')  
 DEPTH LANDED: 304.45'(GL)  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 120 sxs Premium cmt, est 6 bbls cmt to surf.

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 146 jts. (6180.51')  
 DEPTH LANDED: 6164.75'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 360 sk HiBond mixed & 340 sxs thixotropic  
 CEMENT TOP AT: 1305' per CBL

**TUBING**

SIZE/GRADE/WT.: 2-7/8"/M-50/6.5#  
 NO. OF JOINTS: 194 jts.  
 TUBING ANCHOR: 5808'  
 SEATING NIPPLE: 2-7/8" (1.10')  
 TOTAL STRING LENGTH: EOT @ 6034'  
 SN LANDED AT: 5965'

**SUCKER RODS**

POLISHED ROD: 1-1/2" x 22' polished rod.  
 SUCKER RODS: 4-1" scapered, 5-7/8" plain rods, 130-3/4" plain, 99-3/4" scapered  
 TOTAL ROD STRING LENGTH: ?  
 PUMP NUMBER: ?  
 PUMP SIZE: 2-1/2 x 1-1/2 z 15-1/2" RHAC pump  
 STROKE LENGTH: 74"  
 PUMP SPEED, SPM: 8 SPM  
 LOGS: Dual Laterlog, GR, SP, Spectral Density-Dual Spaced Neutron, CBL-GR

**FRAC JOB**

7/18/97 5833'-5942' **Frac CP-2 & CP-3 sands as follows:**  
 96,000# of 20/40 sand in 519 bbls of Boragel. Perfs Broke down @ 2537 psi. Treated @ avg press of 1300 psi w/avg rate of 26.5 bpm. ISIP-1835 psi, 5-min 1763 psi. Flowback on 12/64" ck for 4-1/2 hours and died.

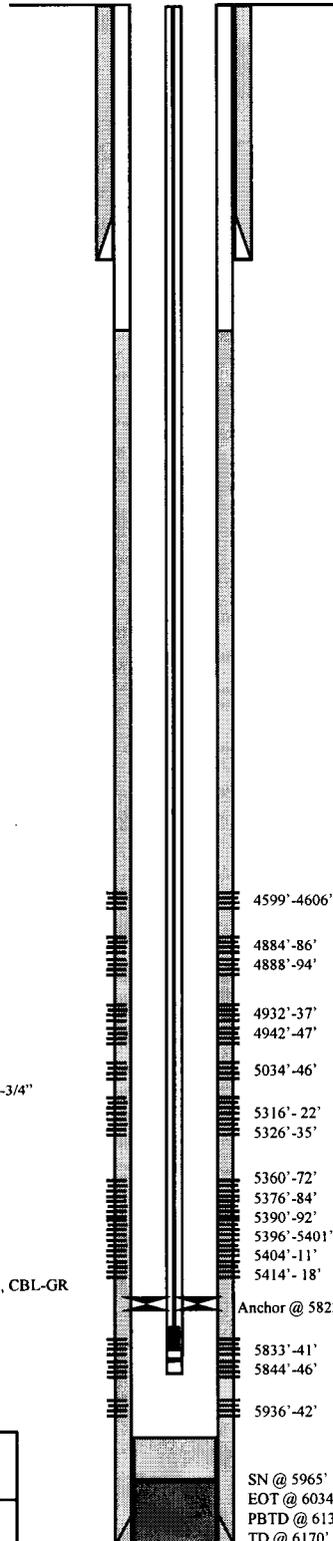
7/21/97 5316'-5418' **Frac A-3 sands as follows:**  
 149,200# of sand in 694 bbls of Boragel. Perfs brokedown @ 2106 psi. Treated @ avg press of 1550 psi w/avg rate of 45 bpm. ISIP-1958 psi, 5-min 1817 psi. Flowback on 12/64" ck for 2-1/2 hours and died.

7/23/97 4884'-5046' **Frac D-1, D-2 & C sands as follows:**  
 137,700# of 20/40 sand in 650 bbls of Boragel. Perfs brokedown @ 2459 psi, then again @ 2896 psi @ 10.6 bpm. Treated @ avg press of 2200 psi w/avg rate of 36 bpm. ISIP-3204 psi, 5-min 3089 psi. Flowback on 12/64" ck for 3-1/2 hours and died.

7/24/97 4599'-4606' **Frac PB-10 sands as follows:**  
 73,600# of 20/40 sand in 398 bbls of Boragel. Perfs brokedown @ 2795 psi. Treated @ avg press of 2231 w/avg rate of 22.2 bpm. ISIP-3206 psi, 5-min 3125 psi. Flowback on 12/64" ck for 3-1/2 hours and died.

**PERFORATION RECORD**

Date	Depth Range	Tool Joint	Holes
7/17/97	5833'-5841'	4 JSPF	32 holes
7/17/97	5844'-5846'	4 JSPF	8 holes
7/17/97	5936'-5942'	4 JSPF	24 holes
7/19/97	5316'-5322'	2 JSPF	12 holes
7/19/97	5326'-5335'	2 JSPF	18 holes
7/19/97	5360'-5372'	2 JSPF	24 holes
7/19/97	5376'-5384'	2 JSPF	16 holes
7/19/97	5390'-5392'	2 JSPF	4 holes
7/19/97	5396'-5401'	2 JSPF	10 holes
7/19/97	5404'-5411'	2 JSPF	14 holes
7/19/97	5414'-5418'	2 JSPF	8 holes
7/22/97	4884'-4886'	4 JSPF	8 holes
7/22/97	4888'-4894'	4 JSPF	24 holes
7/22/97	4932'-4937'	4 JSPF	20 holes
7/22/97	4942'-4947'	4 JSPF	20 holes
7/22/97	5034'-5046'	4 JSPF	48 holes
7/24/97	4599'-4606'	4 JSPF	28 holes



SN @ 5965'  
 EOT @ 6034'  
 PBTD @ 6131'  
 TD @ 6170'



**Inland Resources Inc.**

**Tar Sands Federal #7-31**

1870 FEL 1947 FNL  
 SWNE Section 31-T8S-R17E  
 Duchesne Co, Utah  
 API #43-013-31684; Lease #U-74869

# UNICHEM

A Division of BJ Services

P.O. Box 217  
Roosevelt, Utah 84066

Attachment F  
Office (801) 722-5066  
Fax (801) 722-5727

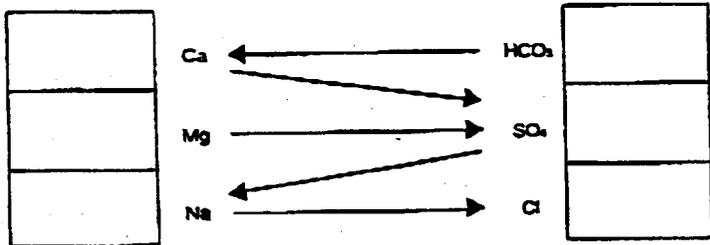
## WATER ANALYSIS REPORT

Company INLAND Address \_\_\_\_\_ Date 01-14-98  
Source Johnson Water FRESH WATER Date Sampled \_\_\_\_\_ Analysis No. \_\_\_\_\_

	Analysis	mg/l(ppm)	*Meq/l
1. PH	<u>7.0</u>		
2. H <sub>2</sub> S (Qualitative)	<u>0.5</u>		
3. Specific Gravity	<u>1.001</u>		
4. Dissolved Solids		<u>593</u>	
5. Alkalinity (CaCO <sub>3</sub> )		<u>0</u>	+ 30 <u>0</u> CO <sub>3</sub>
6. Bicarbonate (HCO <sub>3</sub> )		<u>300</u>	+ 61 <u>5</u> HCO <sub>3</sub>
7. Hydroxyl (OH)		<u>0</u>	+ 17 <u>0</u> OH
8. Chlorides (Cl)		<u>35</u>	+ 35.5 <u>1</u> Cl
9. Sulfates (SO <sub>4</sub> )		<u>110</u>	+ 48 <u>2</u> SO <sub>4</sub>
10. Calcium (Ca)		<u>44</u>	+ 20 <u>2</u> Ca
11. Magnesium (Mg)		<u>22</u>	+ 12.2 <u>2</u> Mg
12. Total Hardness (CaCO <sub>3</sub> )		<u>200</u>	
13. Total Iron (Fe)		<u>2.2</u>	
14. Manganese			
15. Phosphate Residuals			

\*Mill equivalents per liter

### PROBABLE MINERAL COMPOSITION



Compound	Equlv. Wt.	X	Meq/l	=	Mg/l
Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	<u>2</u>			<u>162</u>
CaSO <sub>4</sub>	68.07				
CaCl <sub>2</sub>	55.50				
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17	<u>2</u>			<u>146</u>
MgSO <sub>4</sub>	60.19				
MgCl <sub>2</sub>	47.62				
NaHCO <sub>3</sub>	84.00	<u>1</u>			<u>84</u>
Na <sub>2</sub> SO <sub>4</sub>	71.03	<u>2</u>			<u>142</u>
NaCl	58.46	<u>1</u>			<u>59</u>

Saturation Values	Distilled Water 20°C
CaCO <sub>3</sub>	13 Mg/l
CaSO <sub>4</sub> · 2H <sub>2</sub> O	2,090 Mg/l
MgCO <sub>3</sub>	103 Mg/l

REMARKS \_\_\_\_\_

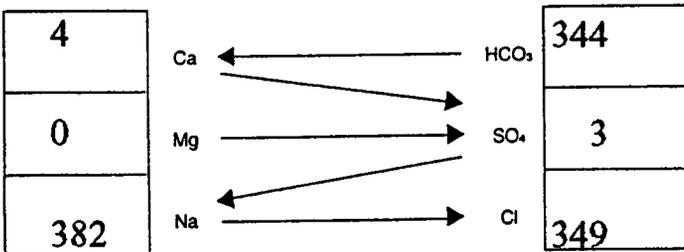
## WATER ANALYSIS REPORT

Company INLAND Address \_\_\_\_\_ Date 01-27-98  
Source TSF 3-31 Date Sampled \_\_\_\_\_ Analysis No. \_\_\_\_\_

	Analysis	mg/l(ppm)	*Meg/l
1. PH	<u>9.3</u>		
2. H <sub>2</sub> S (Qualitative)	<u>1.0</u>		
3. Specific Gravity	<u>1.020</u>		
4. Dissolved Solids		<u>23,460</u>	
5. Alkalinity (CaCO <sub>3</sub> )		<u>240</u>	÷ 30 <u>8</u> CO <sub>3</sub>
6. Bicarbonate (HCO <sub>3</sub> )		<u>1,600</u>	÷ 61 <u>26</u> HCO <sub>3</sub>
7. Hydroxyl (OH)		<u>0</u>	÷ 17 <u>0</u> OH
8. Chlorides (Cl)		<u>12,400</u>	÷ 35.5 <u>349</u> Cl
9. Sulfates (SO <sub>4</sub> )		<u>120</u>	÷ 48 <u>3</u> SO <sub>4</sub>
10. Calcium (Ca)		<u>80</u>	÷ 20 <u>4</u> Ca
11. Magnesium (Mg)		<u>0</u>	÷ 12.2 <u>0</u> Mg
12. Total Hardness (CaCO <sub>3</sub> )		<u>200</u>	
13. Total Iron (Fe)		<u>1.2</u>	
14. Manganese			
15. Phosphate Residuals			

\*Milli equivalents per liter

### PROBABLE MINERAL COMPOSITION



Compound	Equiv. Wt.	X	Meg/l	=	Mg/l
Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	<u>4</u>			<u>324</u>
CaSO <sub>4</sub>	68.07				
CaCl <sub>2</sub>	55.50				
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17				
MgSO <sub>4</sub>	60.19				
MgCl <sub>2</sub>	47.62				
NaHCO <sub>3</sub>	84.00		<u>30</u>		<u>2,520</u>
Na <sub>2</sub> SO <sub>4</sub>	71.03		<u>3</u>		<u>213</u>
NaCl	58.46		<u>349</u>		<u>20,403</u>

Saturation Values	Distilled Water 20°C
CaCO <sub>3</sub>	13 Mg/l
CaSO <sub>4</sub> · 2H <sub>2</sub> O	2,090 Mg/l
MgCO <sub>3</sub>	103 Mg/l

REMARKS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## AQUAMIX SCALING PREDICTIONS

COMPANY: INLAND  
 LOCATION:  
 SYSTEM:

03-04-98

WATER DESCRIPTION:	JOHNSON WATER	TSF 3-31
P-ALK AS PPM CaCO3	0	401
M-ALK AS PPM CaCO3	492	2624
SULFATE AS PPM SO4	110	120
CHLORIDE AS PPM Cl	35	12400
HARDNESS AS PPM CaCO3	0	0
CALCIUM AS PPM CaCO3	110	200
MAGNESIUM AS PPM CaCO3	90	0
SODIUM AS PPM Na	92	8786
BARIUM AS PPM Ba	0	0
STRONTIUM AS PPM Sr	0	0
CONDUCTIVITY	0	0
TOTAL DISSOLVED SOLIDS	593	23460
TEMP (DEG-F)	150	150
SYSTEM pH	7	9.3

WATER COMPATIBILITY CALCULATIONS  
 JOHNSON WATER AND TSF 3-31  
 CONDITIONS: TEMP.=150 AND pH=8.2  
 WATER ONE IS JOHNSON WATER

% OF WATER # 1	STIFF DAVIS CaCO3 INDEX	lbs/1000 BBL EXCESS CaCO3	mg/l BaSO4 IN EXCESS OF SATURATION	mg/l SrO4 IN EXCESS OF SATURATION	mg/l Gypsum IN EXCESS OF SATURATION
100	1.48	36	0	0	0
90	1.59	40	0	0	0
80	1.66	43	0	0	0
70	1.70	46	0	0	0
60	1.73	50	0	0	0
50	1.74	53	0	0	0
40	1.77	56	0	0	0
30	1.79	59	0	0	0
20	1.81	62	0	0	0
10	1.82	65	0	0	0
0	1.83	68	0	0	0

**Attachment G**

**Tar Sands Federal #3-31  
Proposed Maximum Injection Pressure**

Frac Interval (feet)		Avg. Depth (feet)	ISIP (psi)	Frac Gradient (psi/ft)	Pmax
Top	Bottom				
5845	5974	5910	1912	0.76	1899
5429	5562	5496	1851	0.77	1818
4964	5055	5010	3261	1.08	3201
<b>Minimum</b>					<u>1818</u>



Calculation of Maximum Surface Injection Pressure  

$$P_{max} = (\text{Frac Grad} - (0.433 \times 1.005)) \times \text{Depth of Top Perf}$$
 where pressure gradient for the fresh water is .433 psi/ft and specific gravity of the injected water is 1.005.

Frac Gradient is obtained from the service company's frac summary report.



DAILY COMPLETION REPORT

WELL NAME Tar Sands Fed 3-31 Report Date 8/3/97 Completion Day 3
Present Operation Frac CP sands Rig Basin #6

WELL STATUS

Surf Csg: 8-5/8 @ 307' KB Liner @ Prod Csg 5-1/2 @ 6075 Csg PBTB 6030
Tbg: Size 2-7/8 Wt 6.5# Grd M-50 Pkr/EOT @ BP/Sand PBTB:

PERFORATION RECORD

Table with 6 columns: Zone, Perfs, SPF/#shots, Zone, Perfs, SPF/#shots. Rows include CP zones with perforation details.

CHRONOLOGICAL OPERATIONS

Date Work Performed: 8/2/97 SITP: 0 SICP 80

Blow gas off csg. TIH w/swab. IFL @ 5400'. Made 1 run inflow of 100'. FFL @ 5500'. Recovered 3 bbls wtr. TOH w/tbg. RU Halliburton to frac CP sand w/109,400# of 20/40 sd in 573 bbls Boragel. Broke down @ 2609 psi. Treated @ ave rate of 31.4 w/ave pressure 1300 psi. ISIP 1912 psi - 5 min 1358 psi. Flow back on 12/64 ck for 2-1/2 hrs until dead. Rec 85 BTF (14% of load). SIFN w/est 488 BWTR.

FLUID RECOVERY (BBLs)

Starting fluid load to be recovered Starting oil rec to date 0
Fluid lost/recovered today 488 Oil lost/recovered today 0
Ending fluid to be recovered 488 Cum oil recovered 0
IFL 5400 FFL 5500 FTP Choke Final Fluid Rate Final oil cut

STIMULATION DETAIL

COSTS

Base Fluid used: Boragel Job Type: Sand Frac
Company: Halliburton
Procedure:
3000 gal pad
1000 gal w/1-6 ppg of 20/40 sd
10,000 gal w/6-8 ppg of 20/40 sd
4,309 gal w/8-10 ppg pf 20/40 sd
Flush w/5769 gal 10# Linear gel.

Basin #6 696
BOP 130
Tanks 60
Hot oil 903
Halliburton 21,525
IPC Supervision 200

Max TP 2609 Max Rate 33.2 Total fluid pmpd: 24078
Avg TP 1300 Avg Rate 31.4 Total Prop pmpd: 109,400#
ISIP 1912 5 min 1358 10 min 1040 15 min 969
Completion Supervisor: Rod Bird

DAILY COST: \$23,514
TOTAL WELL COST: \$197,987



DAILY COMPLETION REPORT

WELL NAME Tar Sands Fed 3-31 Report Date 8/6/97 Completion Day 5
Present Operation Perf D sand Rig Basin #6

WELL STATUS

Surf Csg: 8-5/8 @ 307' KB Liner @ Prod Csg 5-1/2 @ 6075 Csg PBDT 6030
Tbg: Size 2-7/8 Wt 6.5# Grd M-50 Pkr/EOT @ Sand PBDT: 5670

PERFORATION RECORD

Table with 6 columns: Zone, Perfs, SPF/#shots, Zone, Perfs, SPF/#shots. Rows include CP, A zones with various perforation depths and rates.

CHRONOLOGICAL OPERATIONS

Date Work Performed: 8/5/97 SITP: 0 SICP 0

Swab well down f/2000' to 5200'. Recovered 80 BTF. TOH w/tbg. RU HLS & perf A sands @ 5429-62' w/2 jspf & 5551-62' w/4 jspf. RU Halliburton & frac A sand w/106,000# of 20/40 sand in 550 bbls of Boragel. Broke down @ 2630 psi. Treated w/ave press 1500 psi @ ave rate 30.5 BPM. ISIP 1851 psi, 5 min 1740 psi, 10 min 1512 psi, 15 min 1443 psi. Start flow back after 5 min SI @ 1 BPM until dead. Recovered 168 bbls Frac fluid in 4 hrs (30% of load). SIFN w/est 790 BWTR.

FLUID RECOVERY (BBLs)

Starting fluid load to be recovered 488 Starting oil rec to date 0
Fluid lost/recovered today 302 Oil lost/recovered today
Ending fluid to be recovered 790 Cum oil recovered
IFL FFL FTP Choke Final Fluid Rate Final oil cut

STIMULATION DETAIL

COSTS

Base Fluid used: Boragel Job Type: Sand frac
Company: Halliburton
Procedure:
3000 gal pad
1000 gal w/1-6 ppg of 20/40 sd
8000 gal w/6-8 ppg of 20/40 sd
4000 gal w/8-10 ppg of 20/40 sd
1735 gal w/10 ppg of 20/40 sd
Flush w/5347 gal of 10# Linear gel.

Rig 1,209
BOP's 140
Tanks 70
HOT 750
Wtr 70
HLS 2,300
Halliburton Stimulation 21,593
IPC Supervision 200

Max TP 2630 Max Rate 31.8 Total fluid pmpd: 550 bbls
Avg TP 1500 Avg Rate 30.5 Total Prop pmpd: 106,000#
ISIP 1851 5 min 1740 10 min 1512 15 min 1443
Completion Supervisor: Rod Bird

DAILY COST: \$26,962
TOTAL WELL COST: \$228,666



DAILY COMPLETION REPORT

WELL NAME Tar Sands Fed 3-31 Report Date 8/8/97 Completion Day 7
Present Operation Pull RBP's. Rig Basin #6

WELL STATUS

Surf Csg: 8-5/8 @ 307' KB Liner @ Prod Csg 5-1/2 @ 6075 Csg PBDT 6030
Tbg: Size 2-7/8 Wt 6.5# Grd M-50 Pkr/EOT @ Sand PBDT: 5165

PERFORATION RECORD

Table with 6 columns: Zone, Perfs, SPF/#shots, Zone, Perfs, SPF/#shots. Contains data for zones D, CP, and A with various perforation intervals and shot counts.

CHRONOLOGICAL OPERATIONS

Date Work Performed: 8/7/97 SITP: 0 SICP: 50

RU swab eq. IFL @ 4500'. Made 4 runs, recovered 5 BW (trace oil). TOH w/tbg. RU Halliburton & frac D sand w/107,100# of 20/40 sd in 510 bbls of Boragel. Break dn @ 2043 psi. Treated @ ave/rate of 27.5 bpm w/ave press of 2270 psi. ISIP: 3261 psi, 5min SI: 3141 psi. Flow back @ 1 bpm until dead. Recovered 135 bbls in 4-1/2 hrs. SIFN w/est 1034 BWTR.

FLUID RECOVERY (BBLs)

Starting fluid load to be recovered 664 Starting oil rec to date 0
Fluid lost/recovered today 370 Oil lost/recovered today
Ending fluid to be recovered 1034 Cum oil recovered
IFL FFL FTP Choke Final Fluid Rate Final oil cut

STIMULATION DETAIL

Base Fluid used: Boragel Job Type: Sand Frac
Company: Halliburton
Procedure:
3000 gal of pad
1000 gal w/1-6 ppg of 20/40 sd
8000 gal w/6-8 ppg of 20/40 sd
4000 gal w/8-10 ppg of 2/40 sd
557 gal w/10 ppg of 20/40 sd
Flush w/4883 gal of 10# Linear gel

COSTS

Rig 638
BOP's 140
Tanks 60
HOT 665
Wtr 650
Halliburton 21,360
IPC Supervision 200

Max TP 3320 Max Rate 31.1 Total fluid pmpd: 510 bbls
Avg TP 2270 Avg Rate 27.5 Total Prop pmpd: 107,100#
ISIP 3261 5 min 3141 10 min FB 2381 15 min FB 2169
Completion Supervisor: Brad Mecham

DAILY COST: \$23,713
TOTAL WELL COST: \$257,068

**ATTACHMENT H**

**WORK PROCEDURE FOR PLUGGING AND ABANDONMENT**

1. **Plug #1** Set 279' plug from 5745'-60247' with 30 sxs Class "G" cement.
2. **Plug #2** Set 283' plug from 5329'-5612' with 30 sxs Class "G" cement.
3. **Plug #3** Set 256' plug from 4864'-5120' with 30 sxs Class "G" cement.
4. **Plug #4** Set 200' plug from 2000'-2200' with 30 sxs Class "G" cement.
5. **Plug #5** Set 100' plug from 246'-346' (50' on either side of casing shoe) with 15 sxs Class "G" cement.
6. **Plug #6** Set 50' plug from surface with 10 sxs Class "G" cement.
7. **Pump 10 sxs Class "G" cement down the 8-5/8" x 5-1/2" annulus to cement 296' to surface.**

**The approximate cost to plug and abandon this well is \$18,000.**

# Tar Sands Federal #3-31

Spud Date: 7/8/97  
 Put on Production: 8/11/97  
 GL: 5283' KB: 5296'

Proposed P&A Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (296.30')  
 DEPTH LANDED: 294.56'(GL)  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 120 sxs Premium cmt, est 5 bbls cmt to surf.

**PRODUCTION CASING**

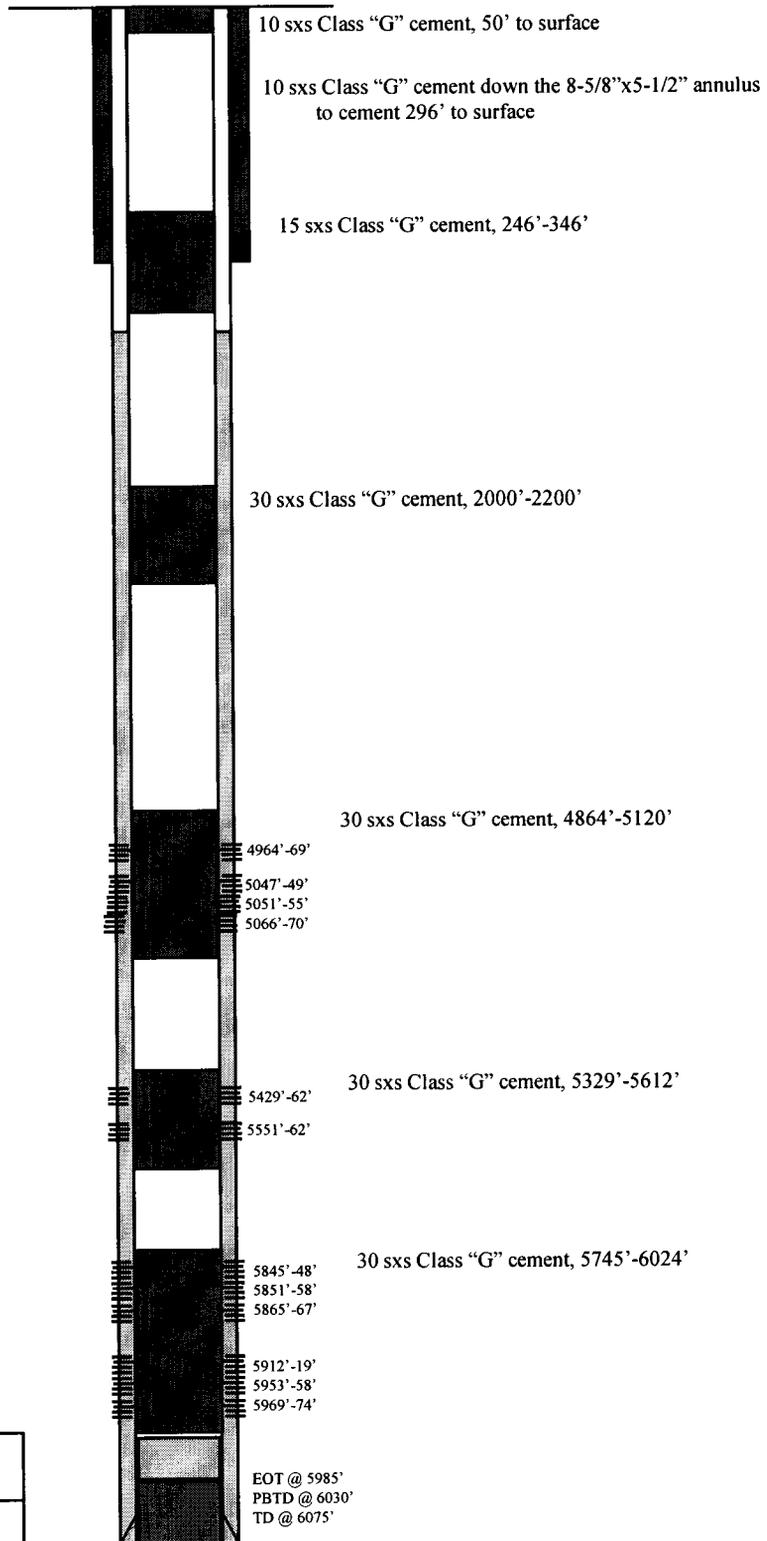
CSG SIZE: 5-1/2"  
 GRADE: J-55  
 WEIGHT: 15.5#  
 LENGTH: 144 jts. (6033.86')  
 DEPTH LANDED: 6075.54'  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 340 sk HiBond mixed & 320 sxs thixotropic  
 CEMENT TOP AT: 977' per CBL

**TUBING**

SIZE/GRADE/WT.:  
 NO. OF JOINTS.:  
 TUBING ANCHOR:  
 SEATING NIPPLE:  
 TOTAL STRING LENGTH:  
 SN LANDED AT:

**SUCKER RODS**

POLISHED ROD.:  
 SUCKER RODS:  
 TOTAL ROD STRING LENGTH:  
 PUMP NUMBER:  
 PUMP SIZE:  
 STROKE LENGTH:  
 PUMP SPEED, SPM:  
 LOGS:



**Inland Resources Inc.**

**Tar Sands Federal #3-31**

771 FNL 1978 FWL

NENW Section 31-T8S-R17E

Duchesne Co, Utah

API #43-013-31733; Lease #U-74869

OPERATOR INLAND PRODUCTION COMPANY

OPERATOR ACCT. NO. N 5160

ADDRESS \_\_\_\_\_

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	APT NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
D		12308									
WELL 1 COMMENTS: *SAND WASH (GREEN RIVER) UNIT EFF 12-01-97; ALL WELLS LISTED SHOULD BE GROUPED TOGETHER UNDER A COMMON ENTITY NUMBER AS PER OPERATOR REQUEST EFF 12-1-97. (SEE ATTACHED)											
WELL 2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

(3/89)

L. CORDOVA (DOGM)

Signature

ADMIN. ANALYST

3-11-98

Title

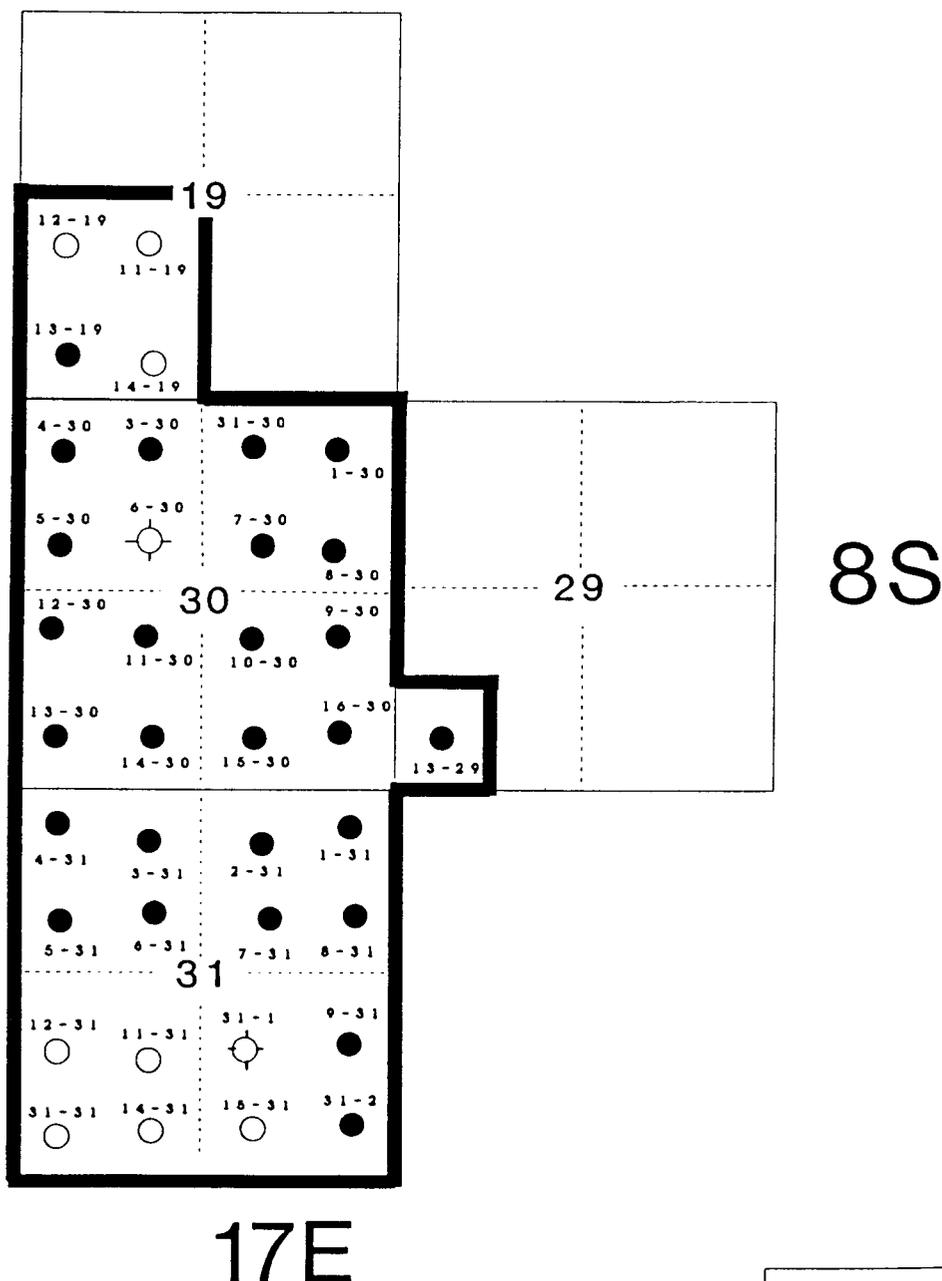
Date

Phone No. ( )

# SAND WASH (GREEN RIVER) UNIT

## Duchesne County, Utah

EFFECTIVE: DECEMBER 1, 1997



— UNIT OUTLINE (UTU76788X)  
1,444.06 ACRES

SECONDARY ALLOCATION	
FEDERAL	96.94%
FEE	3.06%

## INLAND PRODUCTION COMPANY SANDWASH UNIT

AS OF 3/10/98

SANDWASH UNIT	WELL NAME & # W/ RANGE & TOWNSHIP	API NUMBER	
	TAR SANDS #13-29-8-17	43-013-31925	12218
	TAR SANDS #1-30-8-17	43-013-31898	12251
Wildrose Resources	<del>HARBOUR TOWN #31-30-8-17 (2-30)</del>	<del>43-013-31758</del>	<del>12097</del>
	TAR SANDS #3-30-8-17	43-013-31755	12045
	TAR SANDS #4-30-8-17	43-013-31621	11916
	TAR SANDS #5-30-8-17	43-013-31620	11958
	TAR SANDS #7-30-8-17	43-013-31807	12131
	TAR SANDS #8-30-8-17	43-013-31870	12141
	TAR SANDS #9-30-8-17	43-013-31873	12177
	TAR SANDS #10-30-8-17	43-013-31808	12126
	TAR SANDS #11-30-8-17	43-013-31732	12041
	TAR SANDS #12-30-8-17	43-013-31543	11945
	TAR SANDS #13-30-8-17	43-013-31637	11940
	TAR SANDS #15-30-8-17	43-013-31874	12164
	TAR SANDS #16-30-8-17	43-013-31708	12070
	TAR SANDS #1-31-8-17	43-013-31654	12012
	TAR SANDS #2-31-8-17	43-013-31866	12142
	TAR SANDS #3-31-8-17	43-013-31733	12162
	TAR SANDS #4-31-8-17	43-013-31606	11953
	TAR SANDS #5-31-8-17	43-013-31607	12140
	TAR SANDS #6-31-8-17	43-013-31686	12163
	TAR SANDS #7-31-8-17	43-013-31684	12149
	TAR SANDS #8-31-8-17	43-013-31615	11913
	TAR SANDS #9-31-8-17	43-013-31616	12220
Wildrose Resources	<del>GOVT #31-2-8-17 (16-31)</del>	<del>43-013-20082</del>	<del>06300</del>

To: Lisa  
 From: Debbie



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

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 Box 145801  
 Salt Lake City, Utah 84114-5801  
 801-538-5340  
 801-359-3940 (Fax)  
 801-538-7223 (TDD)

FACSIMILE COVER SHEET

DATE: 01-09-98

NUMBER OF PAGES INCLUDING THIS COVER SHEET: 4

TO: KEBBIE JONES  
INLAND PRODUCTION COMPANY

FAX NUMBER: (801)722-9149

FROM: LISHA CORDOVA  
DIVISION OF OIL GAS AND MINING

PHONE: (801) 538-5340  
 FAX: (801) 359-3940

SUBJECT: PLEASE REVIEW ENTITY ASSIGNMENTS FOR THE UNITS LISTED BELOW:  
ASHLEY, BOUNDARY, SAND WASH (GREEN RIVER) \*PLATS ATTACHED

REMARKS: IF YOU WOULD LIKE A "COMMON" ENTITY NUMBER ASSIGNED FOR  
REPORTING PURPOSES, PLEASE LET ME KNOW ASAP! ANY QUESTIONS, PLEASE  
CALL ME AT 538-5296. THANK YOU!

Should you encounter any problems with this copy, or do not receive all the pages, please call

Important: This message is intended for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return this original message to us at the above address via regular postal service. Thank you.



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

Michael O. Leavitt  
Governor  
Ted Stewart  
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 2, 1998

Inland Production Company  
475 Seventeenth Street, Suite 1500  
Denver, Colorado 80202

Re: Sand Wash Unit 3-30, 1-30, 7-30, 11-30, 9-30, 15-30, 7-31 and 3-31 Wells, Sections 30 and 31, Township 8 South, Range 17 East, Duchesne County, Utah

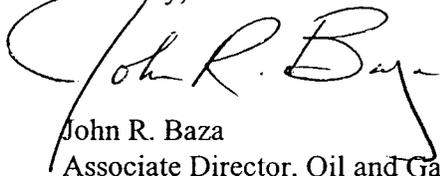
Gentlemen:

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

1. Compliance with all applicable requirements for the operation, maintenance and reporting for Underground Injection Control ("UIC") Class II injection wells pursuant to Utah Admin. Code R649-1 et seq.
2. Conformance with all conditions and requirements of the complete application submitted by Inland Production Company.
3. A casing/tubing pressure test shall be conducted prior to commencing injection.

If you have any questions regarding this approval or the necessary requirements, please contact Dan Jarvis at this office.

Sincerely,



John R. Baza  
Associate Director, Oil and Gas

lwp

cc: Dan Jackson, EPA  
Ed Bonner, SITLA  
BLM, Vernal

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

---ooOoo---

IN THE MATTER OF THE	:	NOTICE OF AGENCY
APPLICATION OF INLAND	:	ACTION
PRODUCTION COMPANY FOR	:	
ADMINISTRATIVE APPROVAL OF	:	CAUSE NO. UIC-207
THE 3-30, 1-30, 7-30, 11-30, 9-30,	:	
15-30, 7-31 AND 3-31 WELLS	:	
LOCATED IN SECTIONS 30 AND 31,	:	
TOWNSHIP 8 SOUTH, RANGE 17	:	
EAST, S.L.M., DUCHESNE COUNTY,	:	
UTAH, AS CLASS II INJECTION	:	
WELLS	:	

---ooOoo---

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

Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Inland Production Company for administrative approval of the 3-30, 1-30, 7-30, 11-30, 9-30, 15-30, 7-31 and 3-31 wells, located in Sections 30 and 31, Township 8 South, Range 17 East, S.L.M., Duchesne County, Utah, for conversion to Class II injection wells. The proceeding will be conducted in accordance with Utah Admin. R.649-10, Administrative Procedures.

The Green River Formation will be selectively perforated for water injection. The maximum injection pressure and rate will be determined on each individual well based on fracture gradient information submitted by Inland Production Company.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. If such a protest or notice of intervention is received, a hearing will be scheduled before the Board of Oil, Gas and Mining. Protestants and/or intervenors should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 10th day of March 1998.

STATE OF UTAH  
DIVISION OF OIL, GAS & MINING

  
John R. Baza  
Associate Director

DIVISION OF OIL, GAS AND MINING  
UNDERGROUND INJECTION CONTROL PROGRAM

**PERMIT  
STATEMENT OF BASIS**

**Applicant:** Inland Production Company

**Well:** Tar Sands Fed. 3-31

**Location:** 31/8S/17E

**API:** 43-013-31733

A complete Statement of Basis was prepared for the Sand Wash Unit project. All of the below issues were addressed in detail. This statement addresses only well specific issues.

**Ownership Issues:** The proposed well is located on lands administered by the BLM. Surface ownership in the one-half mile radius of the well is BLM and School Institutional Trust Lands (SITLA). Minerals in the one half mile radius are owned by the federal government and the State of Utah. Inland has submitted an affidavit stating that all owners and interest owners have been notified of their intent to convert the well to an injection well.

**Well Integrity:** The proposed well has surface casing set at 294 feet and is cemented to surface. A 5 ½ inch production casing is set at 6075 feet and has a reported cement top at 977 feet. A cement bond log verifies adequate bond well above the injection zone. A 2 7/8 inch tubing with a packer will be set approximately 50 feet above the injection zone. A mechanical integrity test will be run on the well prior to injection. There are 9 producing wells in the area of review. The producing wells have adequate casing and cement. No corrective action will be required.

**Ground Water Protection:** The base of moderately saline water is at a depth of approximately 1300 feet. Injection shall be limited to the interval between 3880 feet and 6150 feet in the Green River Formation (actual zone is 4964-5974). Information submitted by Inland indicates that the fracture gradient for the 3-31 well is .77 psig/ft. The resulting fracture pressure is 1818 psig. The requested maximum pressure was 1818 psi. Injection at this pressure should not initiate any new fractures or propagate existing fractures in the adjacent confining intervals. Any ground water present should be adequately protected.

**Oil/Gas& Other Mineral Resources Protection:** Correlative rights and other interests have been addressed at the hearing on October 22, 1997. Previous reviews in the area indicate that all other interests have been protected.

**Bonding:** Bonded with the BLM

**Actions Taken and Further Approvals Needed:** A notice of agency action was published in both the Salt Lake Tribune and the Uinta Basin Standard. Conditions of approval as set forth are: A casing tubing pressure test be run prior to injection, maximum surface pressure limited to 1818 psi., rate will be limited by pressure and Inland will adhere to all operational procedures as written in their application for approval to convert the well to a class II injection well.

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

Reviewer(s): D.Jarvis Date: 3/19/98

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Designation and Serial No.  
**U-74869**

6. If Indian, Allottee or Tribe Name  
**NA**

7. If Unit or CA, Agreement Designation  
**SAND WASH (GR RVR)**

8. Well Name and No.  
**TAR SANDS FED 3-31**

9. API Well No.  
**43-013-31733**

10. Field and Pool, or Exploratory Area  
**MONUMENT BUTTE**

11. County or Parish, State  
**DUCHESNE COUNTY, UTAH**

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
**INLAND PRODUCTION COMPANY**

3. Address and Telephone No.  
**475 17TH STREET, SUITE 1500, DENVER, COLORADO 80202 (303) 292-0900**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**0711 FNL 1978 FWL      NE/NW Section 31, T08S R17E**

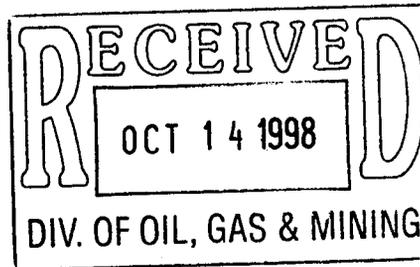
12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

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

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

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Attached please find the site security diagram for the above referenced well.



14. I hereby certify that the foregoing is true and correct  
 Signed Lebbie E. Knight Title Manager, Regulatory Compliance Date 10/8/98

(This space for Federal or State office use)  
 Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
 Conditions of approval, if any:  
**CC: UTAH DOGM**

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.

# Inland Production Company

## Site Facility Diagram

Tar Sands 3-31

NE/NW Sec. 31, T8S, 17E

Duchesne County

Sept. 17, 1998

Site Security Plan is held at the Roosevelt Office, Roosevelt Utah

### Production Phase:

- 1) Valves 1, and 3 sealed closed
- 2) Valves 2 and 4 sealed open

### Sales Phase:

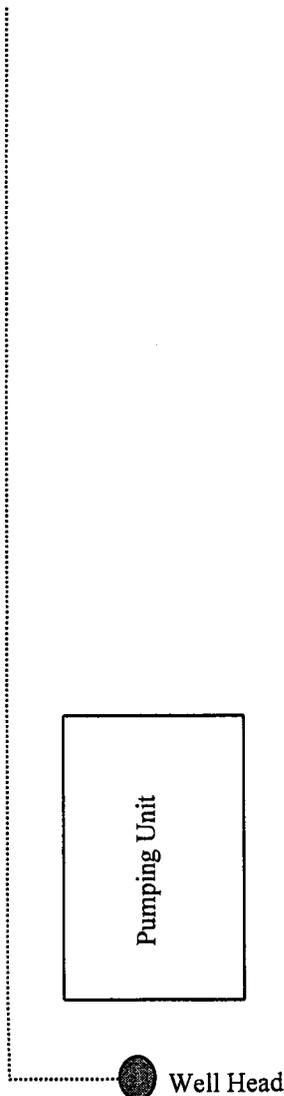
- 1) Valves 2, 3, and 4 sealed closed
- 2) Valves 1 open

### Draining Phase:

- 1) Valve 3 open

### Legend

Emulsion Line	.....
Load Line	-----
Water Line	-----
Oil Line	_____
Gas Sales	-----



COLORLINK STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

No. 3994 P. 9  
BUDGET BUREAU No. 1004-0135  
Expires: March 31, 1993

**CUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Designation and Serial No.  
**U-74869**

6. If Indian, Allottee or Tribe Name  
**NA**

7. If Unit or CA, Agreement Designation  
**SAND WASH (GR RVR)**

8. Well Name and No.  
**TAR SANDS FED 3-31**

9. API Well No.  
**43-013-31733**

10. Field and Pool, or Exploratory Area  
**MONUMENT BUTTE**

11. County or Parish, State  
**DUCHESNE COUNTY, UTAH**

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
**INLAND PRODUCTION COMPANY**

3. Address and Telephone No.  
**Route 3, Box 3630, Myton Utah 84052 (435-646-3721)**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**0711 FNL 1978 FWL      NE/NW Section 31, T08S R17E**

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

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

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

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

The subject well was converted from a production to an injection well on 2/1/00. The rods and tubing anchor were removed and a packer was inserted in the bottom hole assembly at 4869'.

14. I hereby certify that the foregoing is true and correct.  
Signed [Signature] Title District Engineer Date 2/2/00

(This space for Federal or State office use)  
Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

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

WTC  
5-2-00

Sand Wash Unit



## SUMMARY WORKOVER REPORT

PTS FED 03-31

NE/NW Section 31 - T8S - R17E

Duchesne Co., UT

API # 43-013-1733

Spud Dat 7/8/97

TD 6075'

Completion or Workover Rig LEED 697

Injection Conversion

Report Date 1/28/00 Day 1

Date Work Performed 1/27/00

Spot rig In. SIFN.

---

 Daily Cost \$300 Cumulative Cost \$300

Report Date 1/29/00 Day 2

Date Work Performed 1/28/00

Injection Conversion

RU rig #697, HO truck pumped 110 BW down csg @ 250 degrees. Unseat pump & flush tbg w/50 BW @ 250 degrees. Soft seat pump, fill tbg w/15 BW & test to 3000 psi. Unseat pump, POOH, LD rods on a trailer. ND wellhead, unable to release TA. NU BOP & cont to work tbg w/torque, held until TA came free. POOH w/tbg, LD TA, perf sub & NC (had trouble w/TA dragging on trip out). SDFN.

---

 Daily Cost \$2,600 Cumulative Cost \$2,900

Report Date 1/31/00 Day 3

Date Work Performed 1/29/00

Injection Conversion

TIH w/5-1/2" scraper, 192 jts tbg to 5980'. TOOH w/156 jts tbg breaking & applying Liquid-O-Ring to connections. LD 36 jts on trailer. TIH w/5-1/2" Arrowset 1 pkr, SN, 140 jts tbg (re-torque each connection). SDFN.

---

 Daily Cost \$4,400 Cumulative Cost \$7,300

Report Date 2/1/00 Day 4

Date Work Performed 1/31/00

Injection Conversion

Blow well down. Continue to TIH w/32 jts tbg tightening all pin ends. ND BOP's & pump 70 BW w/pkr fluid. Set pkr @ 4869' in 16,000# tension. Fill csg w/50 BW w/pkr fluid & NU wellhead. Pressure test to 1160 psi, watched for 30 minutes w/no leak off. RD tbg equipment & RU rod equipment. RDMO SU. Ready for MIT. EWL 295 bbls.

---

 Daily Cost \$6,200 Cumulative Cost \$13,500

Report Date 2/2/00 Day 5

Date Work Performed 2/1/00

Injection Conversion

The subject well was converted from a production well to an injection well. Mr. Bahram Jafari of the EPA and Mr. Dennis Ingram with the DODM were notified of the intent to perform an MIT on January 31, 2000. On February 1, 2000 the casing annulus was pressured up to 1060 psi & maintained for one-half hour with no pressure loss. Dennis Ingram witnessed and approved the test. MIT complete.

---

 Daily Cost \$100 Cumulative Cost \$13,600



PRODUCTION COMPANY  
A Subsidiary of Inland Resources Inc.

February 1, 2000

Mr. Brad Hill  
State of Utah, DOGM  
1594 West North Temple, Suite 1310  
P.O. Box 145801  
SLC, Utah 84114-5801

Re: Sand Wash 3-31-8-17  
Injection Conversion

Dear Brad:

Inland converted the subject well from a producing to an injection well on January 31, 2000. A mechanical integrity test (MIT) was conducted and witnessed by Mr. Dennis Ingram on February 1, 2000. The casing was pressured to 1060 psi and held for one half hour with no pressure loss.

Find enclosed an MIT sundry, tabular data sheet, and a chart recording of the test. Inland is requesting permission to commence injection on the subject well. Please contact me at the number listed below if you have any questions.

Sincerely,

Rod Bird  
Production Foreman

Enclosures

**RECEIVED**

FEB 03 2000

DIVISION OF  
OIL, GAS AND MINING

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

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Designation and Serial No.  
**U-74869**

6. If Indian, Allottee or Tribe Name  
**NA**

7. If Unit or CA, Agreement Designation  
**SAND WASH (GR RVR)**

8. Well Name and No.  
**TAR SANDS FED 3-31**

9. API Well No.  
**43-013-31733**

10. Field and Pool, or Exploratory Area  
**MONUMENT BUTTE**

11. County or Parish, State  
**DUCHESNE COUNTY, UTAH**

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
**INLAND PRODUCTION COMPANY**

3. Address and Telephone No.  
**Route 3, Box 3630, Myton Utah 84052 (435-646-3721)**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)  
**0711 FNL 1978 FWL                      NE/NW Section 31, T08S R17E**

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

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

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

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

The subject well was converted from a production to an injection well on 2/1//00. The rods and tubing anchor were removed and a packer was inserted in the bottom hole assembly at 4869'.

**RECEIVED**

FEB 03 2000

DIVISION OF  
OIL, GAS AND MINING

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

Signed *[Signature]* Title District Engineer Date 2/2/00

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:

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

<b>1. SUNDRY NOTICES AND REPORTS ON WELLS</b>  (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT--" for such proposals.)		5. LEASE DESIGNATION AND SERIAL NO. <b>U-74869</b>	
OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBAL NAME  <b>N/A</b>	
<b>2. NAME OF OPERATOR</b> <b>INLAND PRODUCTION COMPANY</b>		7. UNIT AGREEMENT NAME  <b>SAND WASH (GR RVR)</b>	
<b>3. ADDRESS OF OPERATOR</b> <b>Route 3, Box 3630, Myton Utah 84052</b> <b>(435-646-3721)</b>		8. FARM OR LEASE NAME <b>TAR SANDS FED 3-31</b>	
<b>4. LOCATION OF WELL</b> (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface <b>NE/NW 0711 FNL 1978 FWL</b>		9. WELL NO. <b>TAR SANDS FED 3-31</b>	
<b>14 API NUMBER</b> <b>43-013-31733</b>		10. FIELD AND POOL OR WILDCAT  <b>MONUMENT BUTTE</b>	
<b>15. ELEVATIONS</b> (Show whether DF, RT, GR, etc.) <b>5283</b>		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <b>NE/NW Section 31, T08S R17E</b>	
<b>12 COUNTY OR PARISH</b> <b>DUCHESNE</b>		13. STATE <b>UT</b>	

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

<b>NOTICE OF INTENTION TO:</b>  TEST WATER SHUT-OFF <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> MULTIPLE COMPLETE <input type="checkbox"/> SHOOT OR ACIDIZE <input type="checkbox"/> ABANDON* <input type="checkbox"/> REPAIR WELL <input type="checkbox"/> (OTHER) <input type="checkbox"/>	<b>SUBSEQUENT REPORT OF:</b>  WATER SHUT-OFF <input type="checkbox"/> REPAIRING WELL <input type="checkbox"/> FRACTURE TREATMENT <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> SHOOTING OR ACIDIZING <input type="checkbox"/> ABANDONMENT* <input type="checkbox"/> (OTHER) <u>Perform MIT.</u> <input type="checkbox"/>  (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
---	--

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

The subject well was converted from a production to an injection well. Mr. Bahram Jafari of the EPA and Mr. Dennis Ingram of the State DOGM were notified of the intent to perform an MIT on January 31, 2000. On February 1, 2000, the casing annulus was pressured to 1060 psi and maintained for one half hour with no pressure loss. Dennis Ingram witnessed and approved the test. Inland is requesting permission to commence injection.

RECEIVED

FEB 03 2000

DIVISION OF  
OIL, GAS AND MINING  
2/1/00

EPA Permit # UT2847-04442

18 I hereby certify that the foregoing is true and correct

SIGNED <u>Rod Bird</u>	TITLE <u>Production Foreman</u>	DATE <u>2/1/00</u>
------------------------	---------------------------------	--------------------

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY:

# MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

MIT Held 1060 psi For 30 min with no leak off.

RECEIVED

FEB 03 2000

DIVISION OF  
OIL, GAS AND MINING

Signature of Witness:

*Jennie L Ingram (State of Utah O&G M)*

EPA ID# UT2847-04442

## OFFICE USE ONLY - COMPLIANCE FOLLOWUP

Staff \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Do you agree with the reported test results?  YES  NO

If not, why? \_\_\_\_\_

Possible violation identified?  YES  NO

If YES, what \_\_\_\_\_

If YES - followup initiated?  YES \_\_\_\_\_

NO - why not? \_\_\_\_\_

Data Entry

Compliance Staff

2<sup>nd</sup> Data Entry

Hardcopy Filing

## INJECTION WELL - PRESSURE TEST

Well Name: <u>TAR SAND FEDERAL 3-31</u>	API Number: <u>43-013-31733</u>
Qtr/Qtr: <u>NE/NW</u>	Section: <u>31</u>
Township: <u>85</u>	Range: <u>17E</u>
Company Name: <u>INLAND PRODUCTION CO</u>	
Lease: State _____ Fee _____	Federal <u>UTU-74869</u> Indian _____
Inspector: <u>Dennis L Ingram</u>	Date: _____

## Initial Conditions:

Tubing - Rate: \_\_\_\_\_ Pressure: 355 psi  
 Casing/Tubing Annulus - Pressure: 1060 psi

## Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
0	<u>1060</u>	<u>355</u>
5	<u>1060</u>	<u>355</u>
10	<u>1060</u>	<u>355</u>
15	<u>1060</u>	<u>355</u>
20	<u>1060</u>	<u>355</u>
25	<u>1060</u>	<u>355</u>
30	<u>1060</u>	<u>355</u>

Results: Pass/Fail

## Conditions After Test:

Tubing Pressure: 355 psiCasing/Tubing Annulus Pressure: 1060 psi

## COMMENTS:

PASSED - GOOD NO LEAK OFF  
TEST WAS ALSO CHARTED

Robbie Reid  
 Operator Representative

RECEIVED

FEB 03 2000

DIVISION OF  
OIL, GAS AND MINING

RECEIVED

Mechanical Integrity Test  
Casing or Annulus Pressure Mechanical Integrity Test

FEB 03 2000

U.S. Environmental Protection Agency  
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW DIVISION OF  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466 OIL, GAS AND MINING

EPA Witness: Dennis L Ingram

Date: 2 / 1 / 00

Test conducted by: Robin Reid

Others present: \_\_\_\_\_

Well Name: <u>Tar Sands Fed. 3-31-8-17</u>	Type: ER SWD	Status: AC TA UC
Field: <u>monument Butte</u>		
Location: <u>NE/NW</u> Sec: <u>31</u> T <u>8</u> N/S R <u>17</u> E/W County: <u>Duchesne</u> State: <u>UT</u>		
Operator: <u>Inland Production</u>		
Last MIT: <u>1 N/A 1</u>	Maximum Allowable Pressure: _____	PSIG

EPA ID.# UT2847-04442

Is this a regularly scheduled test? [ ] Yes [X] No

Initial test for permit? [X] Yes [ ] No

Test after well rework? [ ] Yes [X] No

Well injecting during test? [ ] Yes [X] No If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: 1060 psig

MIT DATA TABLE		Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>				
Initial Pressure	<u>355</u> psig			
End of test pressure	<u>355</u> psig			
<b>CASING / TUBING ANNULUS PRESSURE</b>				
0 minutes	<u>1060</u> psig			
5 minutes	<u>1060</u> psig			
10 minutes	<u>1060</u> psig			
15 minutes	<u>1060</u> psig			
20 minutes	<u>1060</u> psig			
25 minutes	<u>1060</u> psig			
30 minutes	<u>1060</u> psig			
minutes	psig			
minutes	psig			
<b>RESULT</b>	[X] Pass [ ] Fail	[ ] Pass [ ] Fail	[ ] Pass [ ] Fail	[ ] Pass [ ] Fail

Does the annulus pressure build back up after the test? [ ] Yes [X] No



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

### SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Designation and Serial No.

U-74869

6. If Indian, Allottee or Tribe Name

NA

7. If Unit or CA, Agreement Designation

SAND WASH (GR RVR)

8. Well Name and No.

TAR SANDS FED 3-31

9. API Well No.

43-013-31733

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

11. County or Parish, State

DUCHESNE COUNTY, UTAH

**SUBMIT IN TRIPLICATE**

1. Type of Well

<input checked="" type="checkbox"/> Oil Well	<input type="checkbox"/> Gas Well	<input type="checkbox"/> Other
--	-----------------------------------	--------------------------------

2. Name of Operator

INLAND PRODUCTION COMPANY

3. Address and Telephone No.

Route 3, Box 3630, Myton Utah 84052 (435-646-3721)

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

0711 FNL 1978 FWL NE/NW Section 31, T08S R17E

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

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

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

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

The subject well was placed on water injection on 2/23/00.

RECEIVED  
DIVISION OF  
OIL, GAS AND

14. I hereby certify that the foregoing is true and correct  
Signed [Signature] Title District Engineer Date 3/22/00

(This space for Federal or State office use)  
Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

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



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)

UNDERGROUND INJECTION CONTROL PERMIT

Cause No. UIC-207

**Operator:** Inland Production Company  
**Well:** Tar Sands Federal 3-31  
**Location:** Section 31 , Township 8 South, Range 17 East, Duchesne County  
**API No.:** 43-013-31733  
**Well Type:** Enhanced Recovery (waterflood)

Stipulations of Permit Approval

1. Approval for conversion to Injection Well issued on April 2, 1998.
2. Maximum Allowable Injection Pressure: 1818 psig
3. Maximum Allowable Injection Rate: (restricted by pressure limitation)
4. Injection Interval: Green River Formation (4964 feet - 5974 feet)

Approved by:

  
John R. Baza  
Associate Director, Oil And Gas

2/7/2000

Date

cc: Dan Jackson Environmental Protection Agency  
Bureau of Land Management, Vernal  
Inland Production Company, Myton

STATE OF UTAH

DIVISION OF OIL, GAS, AND MINING

1. **SUNDRY NOTICES AND REPORTS ON WELLS**

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

OIL WELL  GAS WELL  OTHER  **Injection Well**

2. NAME OF OPERATOR  
**INLAND PRODUCTION COMPANY**

3. ADDRESS AND TELEPHONE NUMBER  
**Rt. 3 Box 3630, Myton Utah 84052  
435-646-3721**

4. LOCATION OF WELL  
Footages **711 FNL 1978 FWL**  
QQ, SEC. T. R. M. **NE/NW Section 31, T08S R17**

5. LEASE DESIGNATION AND SERIAL NO  
**UTU-74869**

6. IF INDIAN, ALLOTTEE OR TRIBAL NAME  
**N/A**

7. UNIT AGREEMENT NAME  
**SAND WASH (GR RVR)**

8. WELL NAME and NUMBER  
**TAR SANDS FEDERAL 3-31-8-17**

9. API NUMBER  
**43-013-31733**

10. FIELD AND POOL, OR WILDCAT  
**MONUMENT BUTTE**

COUNTY **DUCHESNE**  
STATE **UTAH**

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

NOTICE OF INTENT:  
(Submit in Duplicate)

- ABANDON
- REPAIR CASING
- CHANGE OF PLANS
- CONVERT TO INJECTION
- FRACTURE TREAT OR ACIDIZE
- MULTIPLE COMPLETION
- OTHER \_\_\_\_\_
- NEW CONSTRUCTION
- PULL OR ALTER CASING
- RECOMPLETE
- REPERFORATE
- VENT OR FLARE
- WATER SHUT OFF

SUBSEQUENT REPORT OF:  
(Submit Original Form Only)

- ABANDON\*
- REPAIR CASING
- CHANGE OF PLANS
- CONVERT TO INJECTION
- FRACTURE TREAT OR ACIDIZE
- OTHER **Step Rate Test**
- NEW CONSTRUCTION
- PULL OR ALTER CASING
- RECOMPLETE
- REPERFORATE
- VENT OR FLARE

DATE WORK COMPLETED \_\_\_\_\_

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

\*Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depth for all markers and zones pertinent to this work.)

A step rate test was conducted on the subject well on 3/13/01. Results from the test indicate that the fracture gradient is .635 psi. Therefore, Inland is requesting that the MAIP be changed to 990 psi.

13. NAME & SIGNATURE: Michael Guinn TITLE District Engineer DATE 4/13/01

(This space for State use only)

\* See Instructions On Reverse Side

04/24/01  
CHD

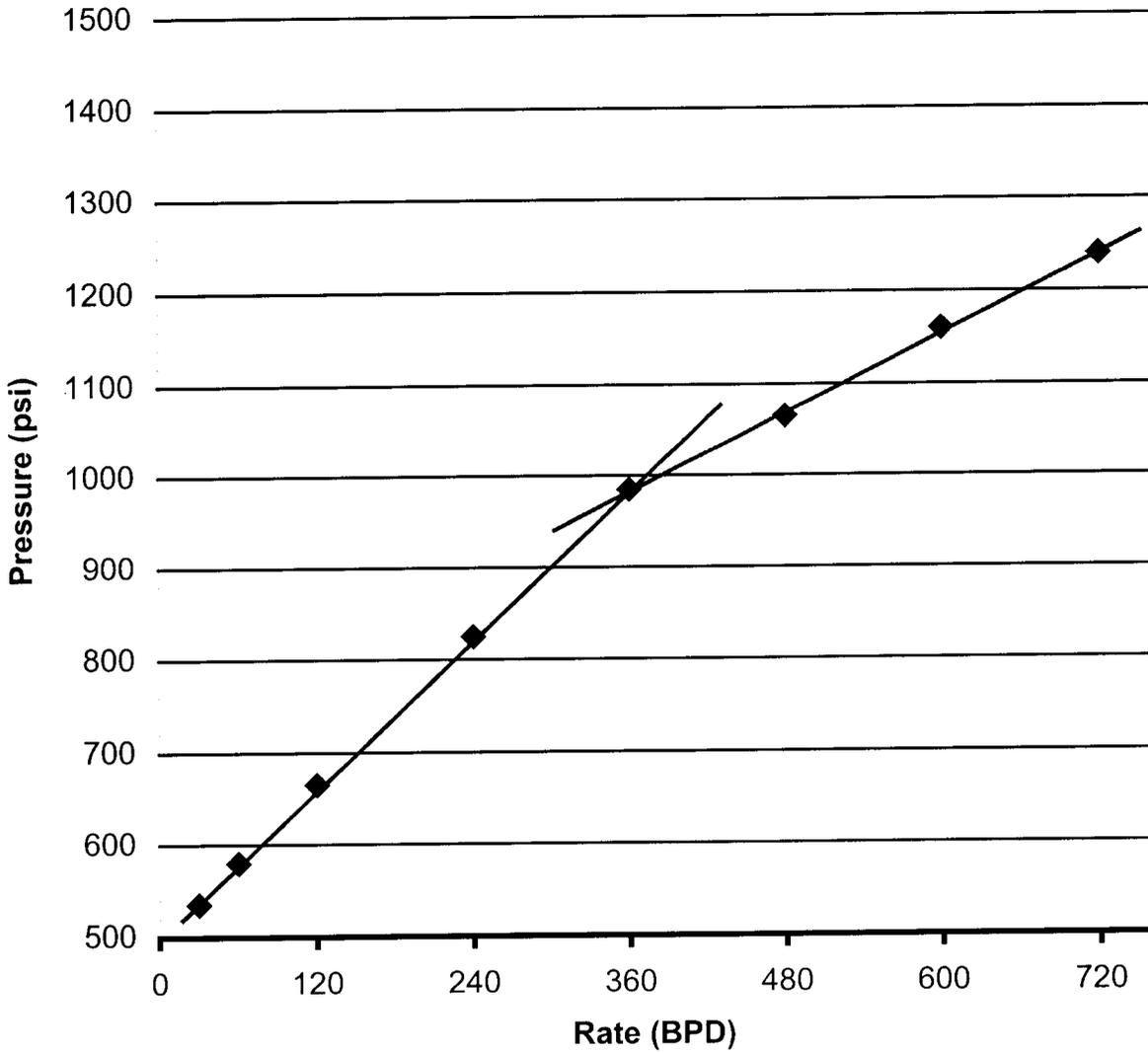
Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 04-24-01  
By: Bradley J. Hall

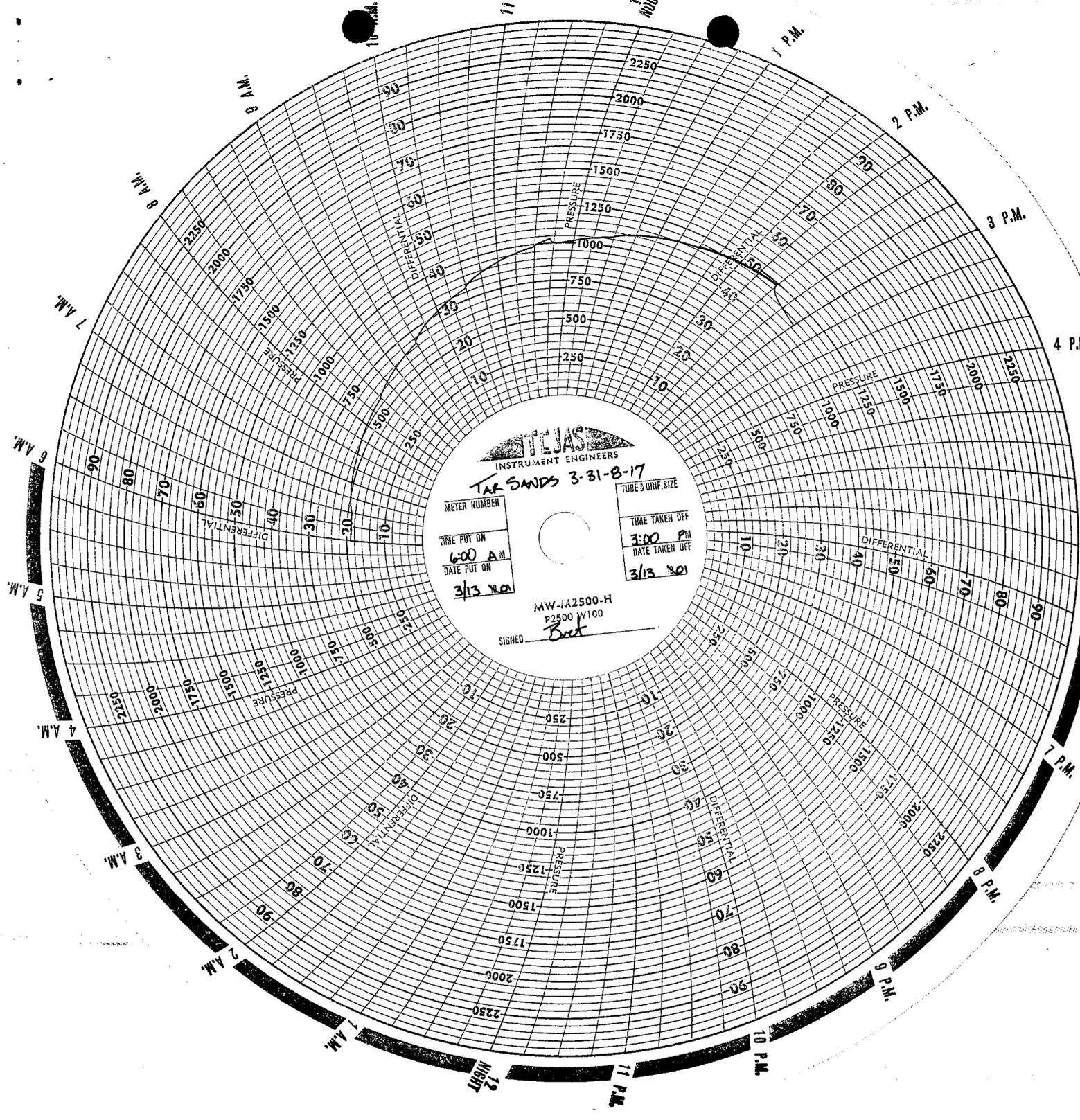
RECEIVED

DIVISION OF  
OIL, GAS AND MINING

ar Sands 3-31-8-17  
 Sand Wash Unit  
 Step Rate Test  
 March 13, 2001



	Step	Rate (bpd)	Pressure (psi)
<b>Start Pressure:</b>	1	30	535
<b>ISIP:</b>	2	60	580
<b>Fracture pressure:</b>	3	120	665
<b>Top Perforation:</b>	4	240	825
<b>FG:</b>	5	360	985
	6	480	1065
	7	600	1160
	8	720	1240



**TELETYPE**  
INSTRUMENT ENGINEERS

**TAR SANDS 3-31-8-17**

METER NUMBER  
TIME PUT ON  
**6:00 A.M.**  
DATE PUT ON  
**3/13 80**

TUBE & ORIF. SIZE  
TIME TAKEN OFF  
**3:00 P.M.**  
DATE TAKEN OFF  
**3/13 80**

MW-1A2500-H  
P2500 W100  
SIGNED *Bert*



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

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

IN REPLY REFER TO:  
3106  
(UT-924)

September 16, 2004

### Memorandum

To: Vernal Field Office

From: Acting Chief, Branch of Fluid Minerals

Subject: Merger Approval

Attached is an approved copy of the name change recognized by the Utah State Office. We have updated our records to reflect the merger from Inland Production Company into Newfield Production Company on September 2, 2004.

Michael Coulthard  
Acting Chief, Branch of  
Fluid Minerals

### Enclosure

1. State of Texas Certificate of Registration

cc: MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225  
State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114  
Teresa Thompson  
Joe Incardine  
Connie Seare

Corporations Section  
P.O.Box 13697  
Austin, Texas 78711-3697



Geoffrey S. Connor  
Secretary of State

## Office of the Secretary of State

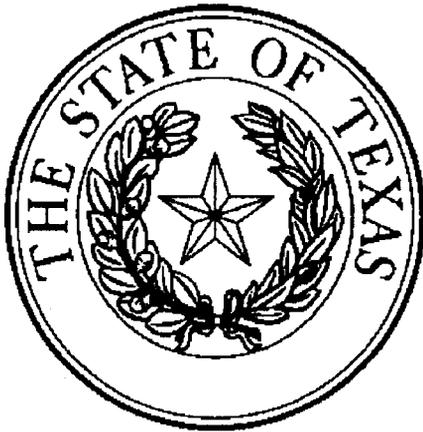
The undersigned, as Secretary of State of Texas, does hereby certify that the attached is a true and correct copy of each document on file in this office as described below:

Newfield Production Company  
Filing Number: 41530400

Articles of Amendment

September 02, 2004

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on September 10, 2004.



A handwritten signature in black ink, appearing to read "G. Connor".

Secretary of State

Come visit us on the internet at <http://www.sos.state.tx.us/>

PHONE(512) 463-5555  
Prepared by: SOS-WEB

FAX(512) 463-5709

TTY7-1-1

ARTICLES OF AMENDMENT  
TO THE  
ARTICLES OF INCORPORATION  
OF  
INLAND PRODUCTION COMPANY

FILED  
In the Office of the  
Secretary of State of Texas  
SEP 02 2004  
Corporations Section

Pursuant to the provisions of Article 4.04 of the Texas Business Corporation Act (the "TBCA"), the undersigned corporation adopts the following articles of amendment to the articles of incorporation:

ARTICLE 1 – Name

The name of the corporation is Inland Production Company.

ARTICLE 2 – Amended Name

The following amendment to the Articles of Incorporation was approved by the Board of Directors and adopted by the shareholders of the corporation on August 27, 2004.

The amendment alters or changes Article One of the Articles of Incorporation to change the name of the corporation so that, as amended, Article One shall read in its entirety as follows:

“ARTICLE ONE – The name of the corporation is Newfield Production Company.”

ARTICLE 3 – Effective Date of Filing

This document will become effective upon filing.

The holder of all of the shares outstanding and entitled to vote on said amendment has signed a consent in writing pursuant to Article 9.10 of the TBCA, adopting said amendment, and any written notice required has been given.

IN WITNESS WHEREOF, the undersigned corporation has executed these Articles of Amendment as of the 1<sup>st</sup> day of September, 2004.

INLAND RESOURCES INC.

By: Susan G. Riggs  
Susan G. Riggs, Treasurer

UTSL-	15855	61052	73088	76561	
071572A	16535	62848	73089	76787	
065914	16539	63073B	73520A	76808	
	16544	63073D	74108	76813	
	17036	63073E	74805	76954	63073X
	17424	63073O	74806	76956	63098A
	18048	64917	74807	77233	68528A
UTU-	18399	64379	74808	77234	72086A
	19267	64380	74389	77235	72613A
02458	26026A	64381	74390	77337	73520X
03563	30096	64805	74391	77338	74477X
03563A	30103	64806	74392	77339	75023X
04493	31260	64917	74393	77357	76189X
05843	33992	65207	74398	77359	76331X
07978	34173	65210	74399	77365	76788X
09803	34346	65635	74400	77369	77098X
017439B	36442	65967	74404	77370	77107X
017985	36846	65969	74405	77546	77236X
017991	38411	65970	74406	77553	77376X
017992	38428	66184	74411	77554	78560X
018073	38429	66185	74805	78022	79485X
019222	38431	66191	74806	79013	79641X
020252	39713	67168	74826	79014	80207X
020252A	39714	67170	74827	79015	81307X
020254	40026	67208	74835	79016	
020255	40652	67549	74868	79017	
020309D	40894	67586	74869	79831	
022684A	41377	67845	74870	79832	
027345	44210	68105	74872	79833	
034217A	44426	68548	74970	79831	
035521	44430	68618	75036	79834	
035521A	45431	69060	75037	80450	
038797	47171	69061	75038	80915	
058149	49092	69744	75039	81000	
063597A	49430	70821	75075		
075174	49950	72103	75078		
096547	50376	72104	75089		
096550	50385	72105	75090		
	50376	72106	75234		
	50750	72107	75238		
10760	51081	72108	76239		
11385	52013	73086	76240		
13905	52018	73087	76241		
15392	58546	73807	76560		

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

UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number See Attached List		API Number
Location of Well		Field or Unit Name See Attached List
Footage :	County :	Lease Designation and Number
QQ, Section, Township, Range:		State : UTAH

EFFECTIVE DATE OF TRANSFER: 9/1/2004

**CURRENT OPERATOR**

Company: <u>Inland Production Company</u>	Name: <u>Brian Harris</u>
Address: <u>1401 17th Street Suite 1000</u>	Signature: <u><i>Brian Harris</i></u>
city <u>Denver</u> state <u>Co</u> zip <u>80202</u>	Title: <u>Engineering Tech.</u>
Phone: <u>(303) 893-0102</u>	Date: <u>9/15/2004</u>
Comments:	

**NEW OPERATOR**

Company: <u>Newfield Production Company</u>	Name: <u>Brian Harris</u>
Address: <u>1401 17th Street Suite 1000</u>	Signature: <u><i>Brian Harris</i></u>
city <u>Denver</u> state <u>Co</u> zip <u>80202</u>	Title: <u>Engineering Tech.</u>
Phone: _____	Date: <u>9/15/2004</u>
Comments:	

(This space for State use only)

Transfer approved by: *A. Hunt* Approval Date: 9-20-04  
 Title: Tech. Services Manager

Comments: Note: Indian Country wells will require EPA approval.

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SEP 20 2004  
DIV. OF OIL, GAS & MINING

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

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU74869
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME: SAND WASH UNIT
8. WELL NAME and NUMBER: TAR SANDS FED 3-31
9. API NUMBER: 4301331733
10. FIELD AND POOL, OR WILDCAT: Monument Butte

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER Injection well	
2. NAME OF OPERATOR: Newfield Production Company	
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052	PHONE NUMBER: 435.646.3721
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 0711 FNL 1978 FWL COUNTY: Duchesne STATE: Utah QTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: NE/NW, 31, T8S, R17E	

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

TYPE OF ACTION

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion: <u>01/27/2005</u>	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - 5 Year MIT
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

A 5 Year MIT was conducted on the subject well. On 1/25/05 Mr. Nathan Wiser was notified of the intent to conduct a MIT on the casing. On 1/26/05 the casing was pressured to 1380 psi w/ no pressure loss charted in the 1/2 hour test. No governmental agencies were able to witness the test.

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

NAME (PLEASE PRINT) <u>Krishna Russell</u>	TITLE <u>Production Clerk</u>
SIGNATURE <u>Krishna Russell</u>	DATE <u>January 27, 2005</u>

(This space for State use only)

**RECEIVED**

**JAN 28 2005**

DIV. OF OIL, GAS & MINING

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 1 / 26 / 05  
 Test conducted by: BRET HENZIE  
 Others present: \_\_\_\_\_

Well Name: <u>TAR SANDS FED 3-31-8-17</u>	Type: <input checked="" type="radio"/> SWD	Status: <input checked="" type="radio"/> TA UC
Field: <u>SANDWASH UNIT</u>		
Location: <u>NE1N4</u> Sec: <u>31</u> T <u>8</u> N/S R <u>17</u> E/W County: <u>Duchesne</u> State: <u>UT</u>		
Operator: <u>NEWFIELD</u>		
Last MIT: <u>2 / 1 / 2000</u>	Maximum Allowable Pressure: <u>992</u>	PSIG

Is this a regularly scheduled test?  Yes  No  
 Initial test for permit?  Yes  No  
 Test after well rework?  Yes  No  
 Well injecting during test?  Yes  No      If Yes, rate: 7 bpd

Pre-test casing/tubing annulus pressure: 0 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>980</u> psig	psig	psig
End of test pressure	<u>980</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1380</u> psig	psig	psig
5 minutes	<u>1380</u> psig	psig	psig
10 minutes	<u>1380</u> psig	psig	psig
15 minutes	<u>1380</u> psig	psig	psig
20 minutes	<u>1380</u> psig	psig	psig
25 minutes	<u>1380</u> psig	psig	psig
30 minutes	<u>1380</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test?  Yes  No

### MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: \_\_\_\_\_



**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. GLH
2. CDW
3. FILE

Change of Operator (Well Sold)

Designation of Agent/Operator

**X Operator Name Change**

**Merger**

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

**9/1/2004**

<b>FROM:</b> (Old Operator): N5160-Inland Production Company Route 3 Box 3630 Myton, UT 84052 Phone: 1-(435) 646-3721	<b>TO:</b> ( New Operator): N2695-Newfield Production Company Route 3 Box 3630 Myton, UT 84052 Phone: 1-(435) 646-3721
---	--

**CA No.**

**Unit:**

**SAND WASH (GREEN RIVER)**

**WELL(S)**

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
BOUNDARY FED 13-19-8-17	19	080S	170E	4301331625	12308	Federal	WI	A
TAR SANDS FED 12-30	30	080S	170E	4301331543	12308	Federal	OW	P
TAR SANDS FED 5-30	30	080S	170E	4301331620	12308	Federal	WI	A
TAR SANDS FED 4-30	30	080S	170E	4301331621	12308	Federal	OW	P
TAR SANDS FED 13-30	30	080S	170E	4301331637	12308	Federal	WI	A
TAR SANDS FED 16-30	30	080S	170E	4301331708	12308	Federal	OW	P
TAR SANDS FED 14-30	30	080S	170E	4301331711	12308	Federal	OW	P
TAR SANDS 6-30-8-17	30	080S	170E	4301331712	12308	Federal	OW	P
TAR SANDS FED 11-30	30	080S	170E	4301331732	12308	Federal	WI	A
TAR SANDS FED 3-30	30	080S	170E	4301331755	12308	Federal	WI	A
HARBOUR TOWN FED 31-30	30	080S	170E	4301331758	12308	Federal	OW	P
TAR SANDS FED 7-30	30	080S	170E	4301331807	12308	Federal	WI	A
TAR SANDS FED 10-30	30	080S	170E	4301331808	12308	Federal	OW	P
GOVERNMENT 31-2	31	080S	170E	4301320082	12308	Federal	OW	P
TAR SANDS FED 4-31	31	080S	170E	4301331606	12308	Federal	OW	P
TAR SANDS FED 5-31	31	080S	170E	4301331607	12308	Federal	WI	A
TAR SANDS FED 8-31	31	080S	170E	4301331615	12308	Federal	OW	P
TAR SANDS FED 9-31	31	080S	170E	4301331616	12308	Federal	OW	P
TAR SANDS FED 1-31	31	080S	170E	4301331654	12308	Federal	WI	A
TAR SANDS FED 7-31	31	080S	170E	4301331684	12308	Federal	WI	A
TAR SANDS FED 6-31	31	080S	170E	4301331686	12308	Federal	OW	P
TAR SANDS FED 3-31	31	080S	170E	4301331733	12308	Federal	WI	A

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 9/15/2004
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 9/15/2004
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 2/23/2005
- Is the new operator registered in the State of Utah: YES Business Number: 755627-0143
- If **NO**, the operator was contacted on:

6a. (R649-9-2)Waste Management Plan has been received on: IN PLACE  
6b. Inspections of LA PA state/fee well sites complete on: waived

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM BIA

8. **Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: na/

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 2/23/2005

**DATA ENTRY:**

- 1. Changes entered in the Oil and Gas Database on: 2/28/2005
- 2. Changes have been entered on the Monthly Operator Change Spread Sheet on: 2/28/2005
- 3. Bond information entered in RBDMS on: 2/28/2005
- 4. Fee/State wells attached to bond in RBDMS on: 2/28/2005
- 5. Injection Projects to new operator in RBDMS on: 2/28/2005
- 6. Receipt of Acceptance of Drilling Procedures for APD/New on: waived

**FEDERAL WELL(S) BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: UT 0056

**INDIAN WELL(S) BOND VERIFICATION:**

1. Indian well(s) covered by Bond Number: 61BSBDH2912

**FEE & STATE WELL(S) BOND VERIFICATION:**

1. (R649-3-1) The NEW operator of any fee well(s) listed covered by Bond Number 61BSBDH2919

2. The FORMER operator has requested a release of liability from their bond on: n/a  
The Division sent response by letter on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

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

**COMMENTS:**

\*Bond rider changed operator name from Inland Production Company to Newfield Production Company - received 2/23/05

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
USA UTU-74869

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
GMBU CTB4

8. WELL NAME and NUMBER:  
TAR SANDS FED 3-31

9. API NUMBER:  
4301331733

10. FIELD AND POOL, OR WILDCAT:  
MONUMENT BUTTE

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 711 FNL 1978 FWL COUNTY: DUCHESNE  
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: NENW, 31, T8S, R17E STATE: UT

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

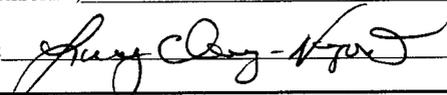
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of Work Completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
12/02/2009	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Five Year MIT
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
On 12/01/2009 Nathan Wiser with the EPA was contacted concerning the 5 year MIT on the above listed well. Permission was given at that time to perform the test on 12/02/2009. On 12/02/2009 the casing was pressured up to 1250 psig and charted for 30 minutes with no pressure loss. The well was injecting during the test. The tubing pressure was 895 psig during the test. There was not an EPA representative available to witness the test.

EPA# UT 20847-04442 API# 43-013-31733

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

NAME (PLEASE PRINT) Lucy Chavez-Naupoto TITLE Administrative Assistant

SIGNATURE  DATE 12/08/2009

(This space for State use only)

**RECEIVED  
DEC 09 2009  
DIV. OF OIL, GAS & MINING**

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 12 12 12009  
 Test conducted by: DAVE CLOWARD  
 Others present: \_\_\_\_\_

Well Name: <u>3-31-8-17</u>	Type: ER SWD	Status: AC TA UC
Field: <u>TAR SANDS FEDERAL</u>		
Location: <u>NE/NW</u> Sec: <u>31</u> T <u>8</u> N/S R <u>17</u> E/W County: <u>Duchesne</u> State: <u>Utah</u>		
Operator: <u>NEWFIELD PRODUCTION CO.</u>		
Last MIT: <u>1 1 26 12005</u> Maximum Allowable Pressure: <u>992</u> PSIG		

Is this a regularly scheduled test?     Yes    [ ] No  
 Initial test for permit?                [ ] Yes     No  
 Test after well rework?                [ ] Yes     No  
 Well injecting during test?             Yes    [ ] No    If Yes, rate: 10 bpd

Pre-test casing/tubing annulus pressure: 0 psig

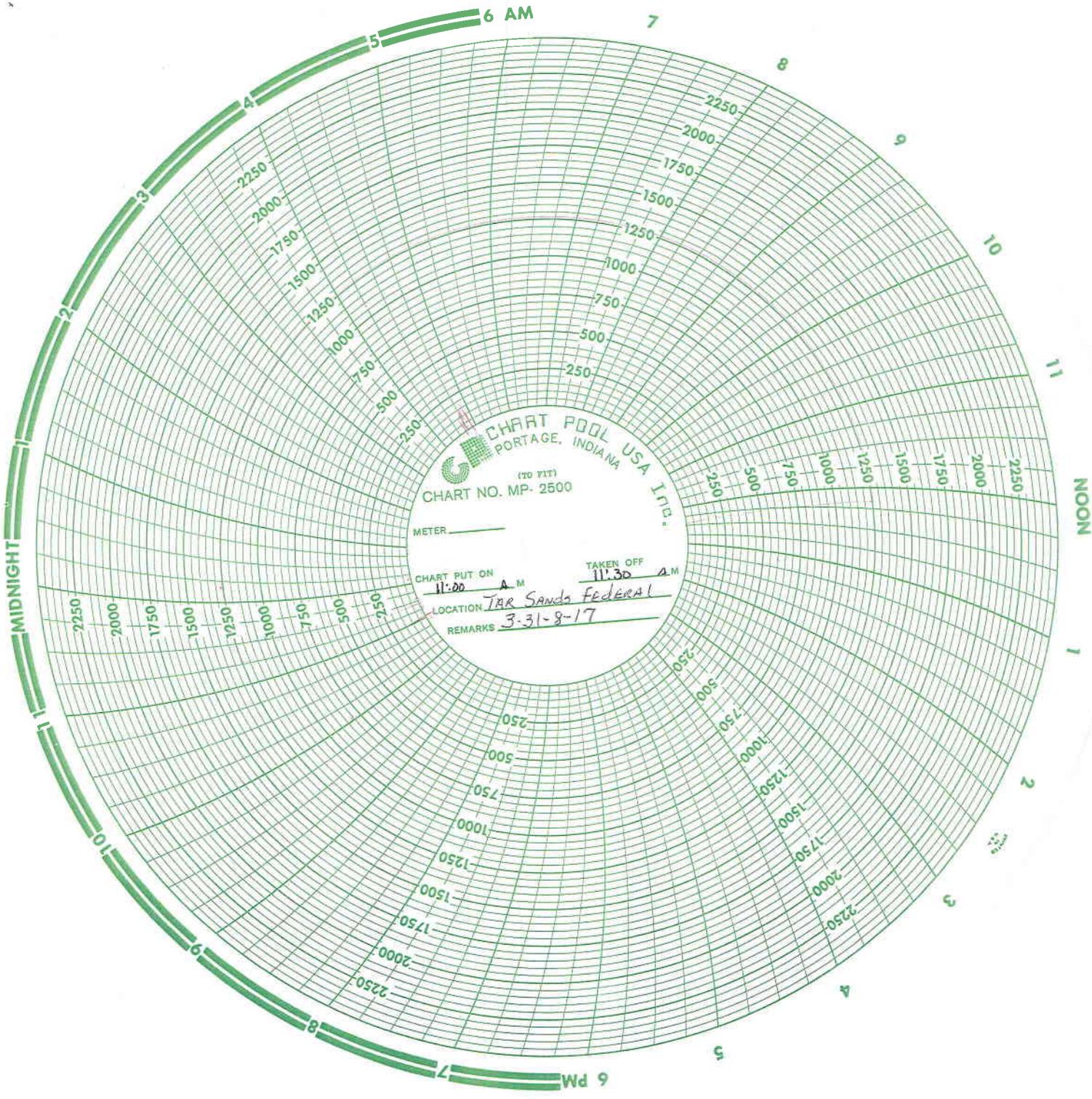
MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>895</u> psig	psig	psig
End of test pressure	<u>895</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1250</u> psig	psig	psig
5 minutes	<u>1250</u> psig	psig	psig
10 minutes	<u>1250</u> psig	psig	psig
15 minutes	<u>1250</u> psig	psig	psig
20 minutes	<u>1250</u> psig	psig	psig
25 minutes	<u>1250</u> psig	psig	psig
30 minutes	<u>1250</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass    [ ] Fail	[ ] Pass    [ ] Fail	[ ] Pass    [ ] Fail

Does the annulus pressure build back up after the test?    [ ] Yes     No

### MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: \_\_\_\_\_



**CHART POOL USA LTD.**  
PORTAGE, INDIANA  
(70 FT)  
CHART NO. MP-2500

METER \_\_\_\_\_

CHART PUT ON 11:00 A.M.      TAKEN OFF 11:30 A.M.

LOCATION TAR SANDS FEDERAL

REMARKS 3-31-8-17

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

5. LEASE DESIGNATION AND SERIAL NUMBER:

USA UTU-74869

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

GMBU

8. WELL NAME and NUMBER:

TAR SANDS FED 3-31

9. API NUMBER:

4301331733

10. FIELD AND POOL, OR WILDCAT:

GREATER MB UNIT

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

1. TYPE OF WELL:

OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR:

NEWFIELD PRODUCTION COMPANY

3. ADDRESS OF OPERATOR:

Route 3 Box 3630 CITY Myton STATE UT ZIP 84052

PHONE NUMBER

435.646.3721

4. LOCATION OF WELL:

FOOTAGES AT SURFACE: 711 FNL 1978 FWL

COUNTY: DUCHESNE

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: NENW, 31, T8S, R17E

STATE: UT

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will  _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion:  10/21/2010	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Step Rate Test
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

A step rate test was conducted on the subject well on October 21, 2010. Results from the test indicate that the fracture gradient is 0.695 psi/ft. Therefore, Newfield is requesting that the maximum allowable injection pressure (MAIP) be changed from 992 psi to 1265 psi.

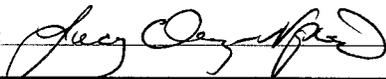
EPA: UT20847-04442 API: 43-013-31733

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

NAME (PLEASE PRINT) Lucy Chavez-Naupoto

TITLE Administrative Assistant

SIGNATURE



DATE 10/27/2010

(This space for State use only)

**RECEIVED**  
NOV 01 2010

DIV. OF OIL, GAS & MINING

## Step Rate Test (SRT) Analysis

Date: 10/25/2010

Operator:

Newfield Production Company

Well:

Tar Sands Federal 3-31-8-17

Permit #:

UT20847-04442

**Enter the following data :**

Specific Gravity (sg) of injectate =	<u>1.015</u>	g/cc	
Depth to top perforation (D) =	<u>4964</u>	feet	4964
Top of permitted injection zone depth (blank=use top perforation to calculate fg) =		feet	
Estimated Formation Parting Pressure (Pfp) from SRT chart =	<u>1270</u>	psi	
Instantaneous Shut In Pressure (ISIP) from SRT =	<u>1345</u>	psi	1270
Bottom Hole Parting Pressure (Pbhp) from downhole pressure recorder =		psi	no downhole

### Part One - Calculation of Fracture Gradient (fg)

**Calculated Fracture Gradient = 0.695 psi/ft.**

where: fg = Pbhp / D (Note: this formula uses the downhole recorded bottom hole parting pressure if available) = 1345

D = depth used = 4964

Pbhp used = 3452

**Calculated Bottom Hole Parting Pressure (Pbhp) = 3452 psi**

3451.653

to calculate Bottom Hole Parting Pressure (Pbhp) = Formation Fracture Pressure (ISIP or Pfp) + (0.433 \* SG \* D)

(Uses lesser of ISIP or Pfp) Value used = 1270

### Part Two - Calculation of Maximum Allowable Injection Pressure (MAIP)

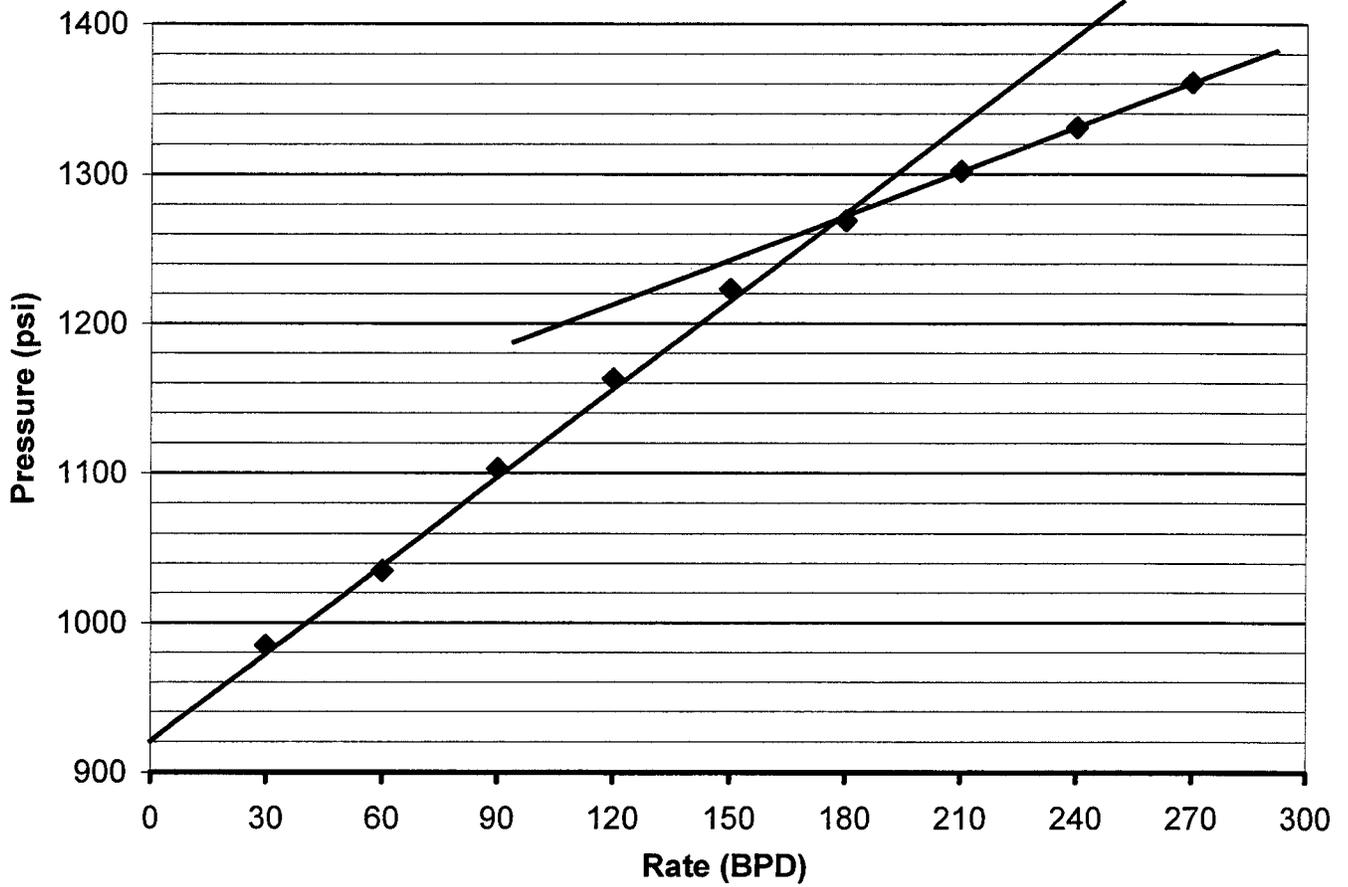
**Maximum Allowable Injection Pressure (MAIP) = 1265 psig**

D = depth used = 4964

MAIP = [(g \* (0.433 \* SG)) \* D] = 1268.327

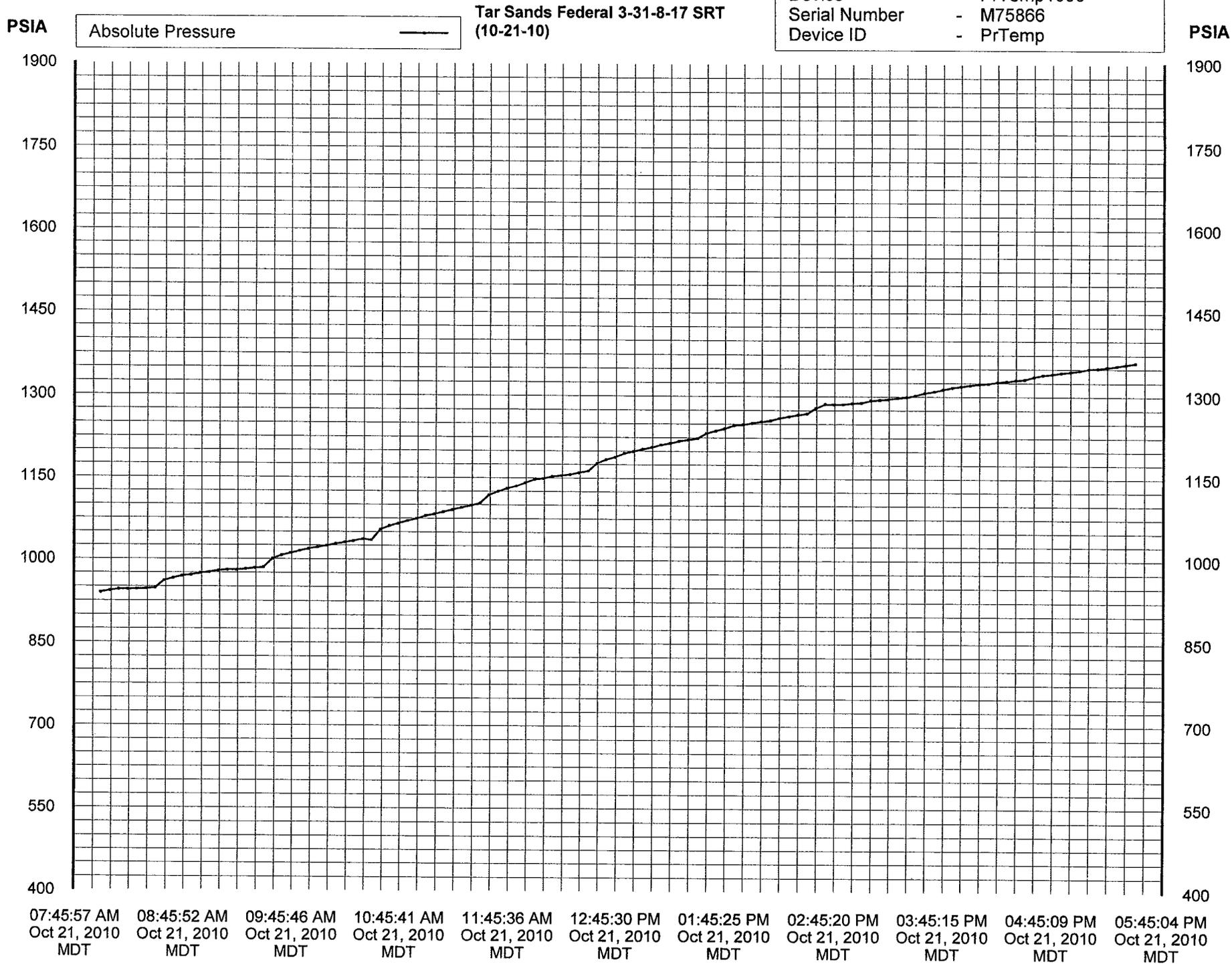
(rounded down to nearest 5 psig)

**Tar Sands Federal 3-31-8-17  
Greater Monument Butte Unit  
Step Rate Test  
October 21, 2010**



<b>Start Pressure:</b>	947 psi	<b>Step</b>	<b>Rate(bpd)</b>	<b>Pressure(psi)</b>
<b>Instantaneous Shut In Pressure (ISIP):</b>	1345 psi	1	30	985
<b>Top Perforation:</b>	4964 feet	2	60	1035
<b>Fracture pressure (Pfp):</b>	1270 psi	3	90	1103
<b>FG:</b>	0.695 psi/ft	4	120	1163
		5	150	1223
		6	180	1269
		7	210	1302
		8	240	1331
		9	270	1361

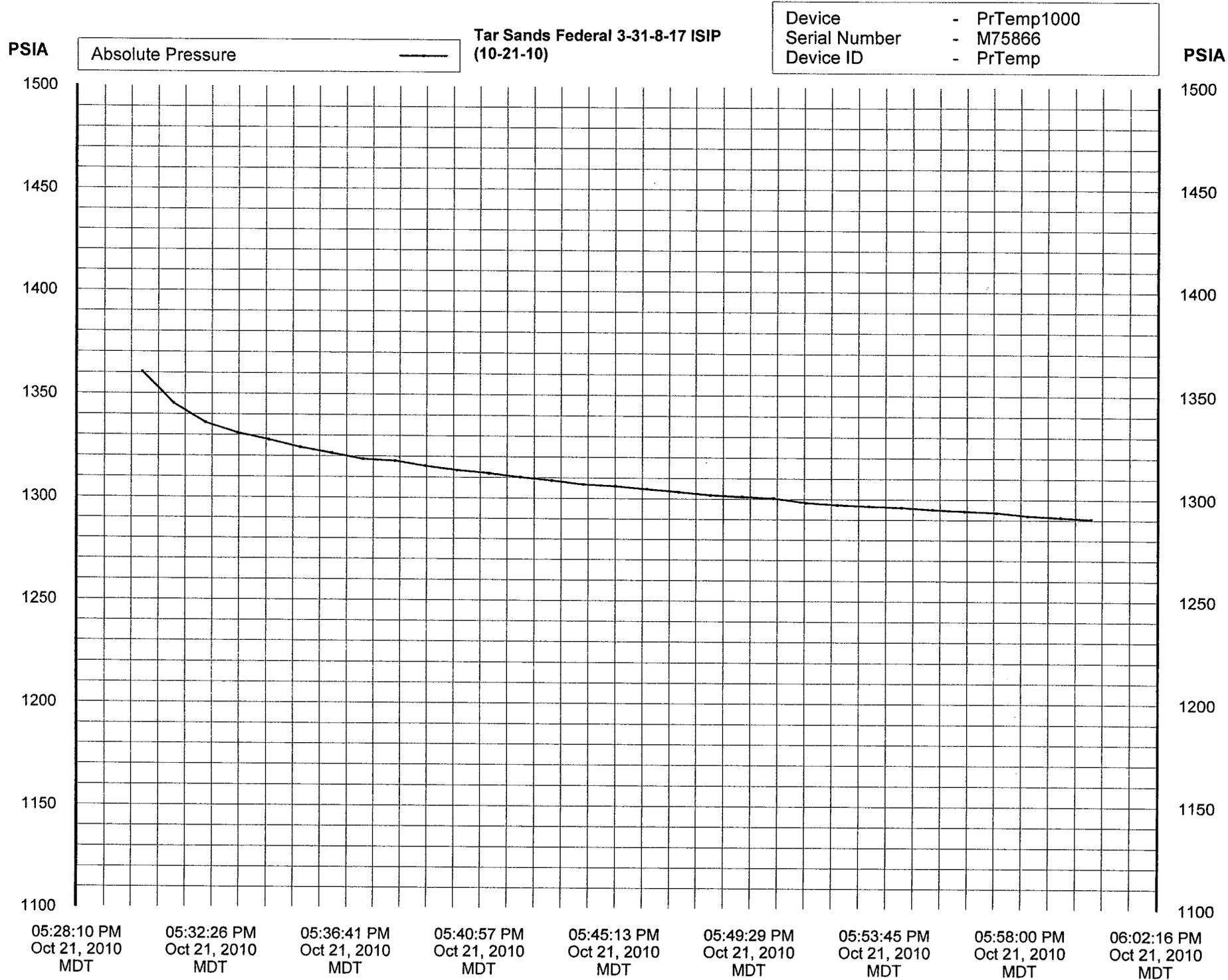
Device - PrTemp1000  
Serial Number - M75866  
Device ID - PrTemp



Report Name: PrTemp1000 Data Table  
 Report Date: Oct 25, 2010 01:25:55 PM MDT  
 File Name: C:\Program Files\PTC@ Instruments 2.00\Tar Sands Federal 3-31-8-17 SRT (10-21-10).csv  
 Title: Tar Sands Federal 3-31-8-17 SRT (10-21-10)  
 Device: PrTemp1000 - Temperature and Pressure Recorder  
 Hardware Revision: REV2C (64K)  
 Serial Number: M75866  
 Device ID: PrTemp  
 Data Start Date: Oct 21, 2010 08:00:00 AM MDT  
 Data End Date: Oct 21, 2010 05:30:00 PM MDT  
 Reading Rate: 2 Seconds  
 Readings: 1 to 115 of 115  
 Last Calibration Date: May 22, 2009  
 Next Calibration Date: May 22, 2010

<u>Reading</u>	<u>Date and Time (MDT)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	Oct 21, 2010 08:00:00 AM	939.200	PSIA
2	Oct 21, 2010 08:05:00 AM	942.600	PSIA
3	Oct 21, 2010 08:10:00 AM	944.800	PSIA
4	Oct 21, 2010 08:14:59 AM	944.800	PSIA
5	Oct 21, 2010 08:19:59 AM	945.400	PSIA
6	Oct 21, 2010 08:24:58 AM	946.000	PSIA
7	Oct 21, 2010 08:29:59 AM	947.200	PSIA
8	Oct 21, 2010 08:34:58 AM	960.400	PSIA
9	Oct 21, 2010 08:40:00 AM	964.800	PSIA
10	Oct 21, 2010 08:45:00 AM	969.000	PSIA
11	Oct 21, 2010 08:49:59 AM	970.600	PSIA
12	Oct 21, 2010 08:55:00 AM	974.000	PSIA
13	Oct 21, 2010 08:59:59 AM	975.600	PSIA
14	Oct 21, 2010 09:05:01 AM	978.200	PSIA
15	Oct 21, 2010 09:10:02 AM	980.200	PSIA
16	Oct 21, 2010 09:15:00 AM	979.800	PSIA
17	Oct 21, 2010 09:20:00 AM	981.600	PSIA
18	Oct 21, 2010 09:25:00 AM	983.200	PSIA
19	Oct 21, 2010 09:30:00 AM	984.600	PSIA
20	Oct 21, 2010 09:34:59 AM	1000.400	PSIA
21	Oct 21, 2010 09:40:00 AM	1006.600	PSIA
22	Oct 21, 2010 09:44:59 AM	1010.600	PSIA
23	Oct 21, 2010 09:50:00 AM	1014.800	PSIA
24	Oct 21, 2010 09:54:59 AM	1018.400	PSIA
25	Oct 21, 2010 10:00:00 AM	1021.400	PSIA
26	Oct 21, 2010 10:04:59 AM	1024.400	PSIA
27	Oct 21, 2010 10:10:00 AM	1027.800	PSIA
28	Oct 21, 2010 10:15:00 AM	1030.800	PSIA
29	Oct 21, 2010 10:19:59 AM	1033.400	PSIA
30	Oct 21, 2010 10:25:00 AM	1037.000	PSIA
31	Oct 21, 2010 10:29:59 AM	1035.000	PSIA
32	Oct 21, 2010 10:35:00 AM	1054.400	PSIA
33	Oct 21, 2010 10:39:59 AM	1061.200	PSIA
34	Oct 21, 2010 10:45:00 AM	1065.400	PSIA
35	Oct 21, 2010 10:50:01 AM	1070.800	PSIA
36	Oct 21, 2010 10:55:00 AM	1074.600	PSIA
37	Oct 21, 2010 11:00:00 AM	1080.000	PSIA
38	Oct 21, 2010 11:04:59 AM	1083.200	PSIA
39	Oct 21, 2010 11:10:00 AM	1087.200	PSIA
40	Oct 21, 2010 11:14:59 AM	1091.200	PSIA
41	Oct 21, 2010 11:20:00 AM	1095.200	PSIA
42	Oct 21, 2010 11:24:59 AM	1099.200	PSIA
43	Oct 21, 2010 11:30:00 AM	1103.200	PSIA
44	Oct 21, 2010 11:34:59 AM	1118.200	PSIA
45	Oct 21, 2010 11:40:00 AM	1125.000	PSIA
46	Oct 21, 2010 11:45:00 AM	1130.200	PSIA
47	Oct 21, 2010 11:49:59 AM	1134.600	PSIA
48	Oct 21, 2010 11:55:00 AM	1140.600	PSIA
49	Oct 21, 2010 11:59:59 AM	1146.800	PSIA
50	Oct 21, 2010 12:05:00 PM	1148.800	PSIA
51	Oct 21, 2010 12:09:59 PM	1152.800	PSIA
52	Oct 21, 2010 12:15:00 PM	1154.400	PSIA
53	Oct 21, 2010 12:19:59 PM	1156.200	PSIA
54	Oct 21, 2010 12:25:00 PM	1159.800	PSIA
55	Oct 21, 2010 12:30:00 PM	1162.800	PSIA
56	Oct 21, 2010 12:34:59 PM	1177.000	PSIA
57	Oct 21, 2010 12:40:00 PM	1184.000	PSIA
58	Oct 21, 2010 12:44:59 PM	1188.800	PSIA
59	Oct 21, 2010 12:50:00 PM	1196.000	PSIA

60	Oct 21, 2010 12:54:59 PM	1199.400	PSIA
61	Oct 21, 2010 01:00:00 PM	1203.600	PSIA
62	Oct 21, 2010 01:04:59 PM	1207.000	PSIA
63	Oct 21, 2010 01:10:01 PM	1211.600	PSIA
64	Oct 21, 2010 01:15:10 PM	1214.600	PSIA
65	Oct 21, 2010 01:19:59 PM	1218.400	PSIA
66	Oct 21, 2010 01:25:00 PM	1221.000	PSIA
67	Oct 21, 2010 01:29:59 PM	1223.400	PSIA
68	Oct 21, 2010 01:35:00 PM	1233.000	PSIA
69	Oct 21, 2010 01:39:59 PM	1237.400	PSIA
70	Oct 21, 2010 01:45:00 PM	1241.800	PSIA
71	Oct 21, 2010 01:49:59 PM	1247.400	PSIA
72	Oct 21, 2010 01:55:00 PM	1249.000	PSIA
73	Oct 21, 2010 02:00:00 PM	1251.800	PSIA
74	Oct 21, 2010 02:04:59 PM	1254.400	PSIA
75	Oct 21, 2010 02:10:10 PM	1256.400	PSIA
76	Oct 21, 2010 02:14:59 PM	1260.800	PSIA
77	Oct 21, 2010 02:20:01 PM	1263.800	PSIA
78	Oct 21, 2010 02:24:59 PM	1267.000	PSIA
79	Oct 21, 2010 02:30:00 PM	1269.000	PSIA
80	Oct 21, 2010 02:34:58 PM	1279.000	PSIA
81	Oct 21, 2010 02:39:59 PM	1286.200	PSIA
82	Oct 21, 2010 02:45:00 PM	1285.600	PSIA
83	Oct 21, 2010 02:49:59 PM	1285.800	PSIA
84	Oct 21, 2010 02:54:59 PM	1288.000	PSIA
85	Oct 21, 2010 02:59:58 PM	1288.800	PSIA
86	Oct 21, 2010 03:05:00 PM	1292.800	PSIA
87	Oct 21, 2010 03:09:59 PM	1293.800	PSIA
88	Oct 21, 2010 03:15:00 PM	1295.200	PSIA
89	Oct 21, 2010 03:19:59 PM	1297.400	PSIA
90	Oct 21, 2010 03:25:00 PM	1298.800	PSIA
91	Oct 21, 2010 03:30:00 PM	1301.600	PSIA
92	Oct 21, 2010 03:34:59 PM	1306.600	PSIA
93	Oct 21, 2010 03:40:00 PM	1309.200	PSIA
94	Oct 21, 2010 03:44:59 PM	1313.000	PSIA
95	Oct 21, 2010 03:50:00 PM	1316.400	PSIA
96	Oct 21, 2010 03:54:59 PM	1318.600	PSIA
97	Oct 21, 2010 04:00:00 PM	1320.800	PSIA
98	Oct 21, 2010 04:04:59 PM	1323.000	PSIA
99	Oct 21, 2010 04:10:00 PM	1324.000	PSIA
100	Oct 21, 2010 04:15:00 PM	1326.600	PSIA
101	Oct 21, 2010 04:19:59 PM	1328.000	PSIA
102	Oct 21, 2010 04:25:00 PM	1330.200	PSIA
103	Oct 21, 2010 04:29:59 PM	1331.400	PSIA
104	Oct 21, 2010 04:35:00 PM	1336.200	PSIA
105	Oct 21, 2010 04:39:59 PM	1339.400	PSIA
106	Oct 21, 2010 04:45:00 PM	1341.200	PSIA
107	Oct 21, 2010 04:49:59 PM	1343.400	PSIA
108	Oct 21, 2010 04:55:00 PM	1345.200	PSIA
109	Oct 21, 2010 05:00:00 PM	1347.400	PSIA
110	Oct 21, 2010 05:04:59 PM	1350.600	PSIA
111	Oct 21, 2010 05:10:00 PM	1351.400	PSIA
112	Oct 21, 2010 05:14:59 PM	1353.600	PSIA
113	Oct 21, 2010 05:20:00 PM	1356.000	PSIA
114	Oct 21, 2010 05:24:59 PM	1358.800	PSIA
115	Oct 21, 2010 05:30:00 PM	1360.800	PSIA



Report Name: PrTemp1000 Data Table  
 Report Date: Oct 25, 2010 01:25:47 PM MDT  
 File Name: C:\Program Files\PTC® Instruments 2.00\Tar Sands Federal 3-31-8-17 ISIP (10-21-10).csv  
 Title: Tar Sands Federal 3-31-8-17 ISIP (10-21-10)  
 Device: PrTemp1000 - Temperature and Pressure Recorder  
 Hardware Revision: REV2C (64K)  
 Serial Number: M75866  
 Device ID: PrTemp  
 Data Start Date: Oct 21, 2010 05:30:13 PM MDT  
 Data End Date: Oct 21, 2010 06:00:13 PM MDT  
 Reading Rate: 2 Seconds  
 Readings: 1 to 31 of 31  
 Last Calibration Date: May 22, 2009  
 Next Calibration Date: May 22, 2010

<u>Reading</u>	<u>Date and Time (MDT)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	Oct 21, 2010 05:30:13 PM	1360.400	PSIA
2	Oct 21, 2010 05:31:13 PM	1345.200	PSIA
3	Oct 21, 2010 05:32:13 PM	1336.000	PSIA
4	Oct 21, 2010 05:33:14 PM	1331.000	PSIA
5	Oct 21, 2010 05:34:13 PM	1327.800	PSIA
6	Oct 21, 2010 05:35:13 PM	1324.200	PSIA
7	Oct 21, 2010 05:36:13 PM	1321.400	PSIA
8	Oct 21, 2010 05:37:13 PM	1318.600	PSIA
9	Oct 21, 2010 05:38:14 PM	1317.800	PSIA
10	Oct 21, 2010 05:39:13 PM	1315.400	PSIA
11	Oct 21, 2010 05:40:13 PM	1313.400	PSIA
12	Oct 21, 2010 05:41:14 PM	1312.000	PSIA
13	Oct 21, 2010 05:42:13 PM	1310.200	PSIA
14	Oct 21, 2010 05:43:13 PM	1308.600	PSIA
15	Oct 21, 2010 05:44:13 PM	1306.800	PSIA
16	Oct 21, 2010 05:45:13 PM	1306.000	PSIA
17	Oct 21, 2010 05:46:13 PM	1304.600	PSIA
18	Oct 21, 2010 05:47:13 PM	1303.200	PSIA
19	Oct 21, 2010 05:48:13 PM	1301.800	PSIA
20	Oct 21, 2010 05:49:13 PM	1301.000	PSIA
21	Oct 21, 2010 05:50:13 PM	1300.400	PSIA
22	Oct 21, 2010 05:51:13 PM	1298.200	PSIA
23	Oct 21, 2010 05:52:13 PM	1297.200	PSIA
24	Oct 21, 2010 05:53:13 PM	1296.600	PSIA
25	Oct 21, 2010 05:54:14 PM	1296.000	PSIA
26	Oct 21, 2010 05:55:13 PM	1295.000	PSIA
27	Oct 21, 2010 05:56:13 PM	1294.200	PSIA
28	Oct 21, 2010 05:57:14 PM	1293.600	PSIA
29	Oct 21, 2010 05:58:13 PM	1292.000	PSIA
30	Oct 21, 2010 05:59:15 PM	1291.200	PSIA
31	Oct 21, 2010 06:00:13 PM	1290.400	PSIA

## Tar Sands Federal 3-31-8-17 Rate Sheet (10-21-10)

<i>Step # 1</i>	Time:	8:35	8:40	8:45	8:50	8:55	9:00
	Rate:	30.4	30.4	30.3	30.3	30.3	30.2
	Time:	9:05	9:10	9:15	9:20	9:25	9:30
	Rate:	30.2	30.2	30.2	30.1	30.1	30.1
<i>Step # 2</i>	Time:	9:35	9:40	9:45	9:50	9:55	10:00
	Rate:	60.5	60.5	60.5	60.5	60.4	60.4
	Time:	10:05	10:10	10:15	10:20	10:25	10:30
	Rate:	60.4	60.4	60.3	60.3	60.2	60.2
<i>Step # 3</i>	Time:	10:35	10:40	10:45	10:50	10:55	11:00
	Rate:	90.4	90.4	90.4	90.3	90.3	90.3
	Time:	11:05	11:10	11:15	11:20	11:25	11:30
	Rate:	90.3	90.2	90.2	90.2	90.2	90.1
<i>Step # 4</i>	Time:	11:35	11:40	11:45	11:50	11:55	12:00
	Rate:	120.6	120.6	120.6	120.6	120.6	120.5
	Time:	12:05	12:10	12:15	12:20	12:25	12:30
	Rate:	120.4	120.4	120.4	120.3	120.3	120.3
<i>Step # 5</i>	Time:	12:35	12:40	12:45	12:50	12:55	1:00
	Rate:	150.5	150.5	150.5	150.4	150.4	150.4
	Time:	1:05	1:10	1:15	1:20	1:25	1:30
	Rate:	150.3	150.2	150.2	150.2	150.2	150.2
<i>Step # 6</i>	Time:	1:35	1:40	1:45	1:50	1:55	2:00
	Rate:	180.5	180.5	180.5	180.4	180.3	180.3
	Time:	2:05	2:10	2:15	2:20	2:25	2:30
	Rate:	180.3	180.3	180.2	180.2	180.2	180.1
<i>Step # 7</i>	Time:	2:35	2:40	2:45	2:50	2:55	3:00
	Rate:	210.5	210.4	210.4	210.4	210.4	210.3
	Time:	3:05	3:10	3:15	3:20	3:25	3:30
	Rate:	210.3	210.2	210.2	210.2	210.1	210.1
<i>Step # 8</i>	Time:	3:35	3:40	3:45	3:50	3:55	4:00
	Rate:	240.4	240.4	240.3	240.3	240.3	240.3
	Time:	4:05	4:10	4:15	4:20	4:25	4:30
	Rate:	240.2	240.2	240.2	240.1	240	240

*Step # 9*

Time:	4:35	4:40	4:45	4:50	4:55	5:00
Rate:	270.5	270.5	270.5	270.3	270.3	270.3
Time:	5:05	5:10	5:15	5:20	5:25	5:30
Rate:	270.2	270.2	270.2	270.1	270.1	270.1

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-74869
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>1. TYPE OF WELL</b> Water Injection Well		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>8. WELL NAME and NUMBER:</b> TAR SANDS FED 3-31
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>9. API NUMBER:</b> 43013317330000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0711 FNL 1978 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENW Section: 31 Township: 08.0S Range: 17.0E Meridian: S		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH

11.

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 11/11/2014	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="5 YR MIT"/>

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

5 YR MIT performed on the above listed well. On 11/11/2014 the casing was pressured up to 1775 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tbg pressure was 1330 psig during the test. There was not an EPA representative available to witness the test. EPA #UT22197-04442

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
November 25, 2014**

<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/12/2014	

# Mechanical Integrity Test Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 11/11/2014  
 Test conducted by: Jonny Daniels  
 Others present: \_\_\_\_\_

Well Name: <u>Tar Sands Federal 3318-17</u>	Type: ER SWD	Status: AC TA UC
Field: <u>GMSU</u>		
Location: _____	Sec: <u>T</u>	N/S R <u>E/W</u> County: <u>Duchesne</u> State: <u>Ut</u>
Operator: <u>Chris Walters</u>		
Last MIT: <u>1/1</u>	Maximum Allowable Pressure: _____	PSIG

Is this a regularly scheduled test?  Yes  No  
 Initial test for permit?  Yes  No  
 Test after well rework?  Yes  No  
 Well injecting during test?  Yes  No If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: 0 psig

MIT DATA TABLE	Test #1		Test #2		Test #3	
<b>TUBING</b>	<b>PRESSURE</b>					
Initial Pressure	<u>1330</u>	psig		psig		psig
End of test pressure	<u>1330</u>	psig		psig		psig
<b>CASING / TUBING</b>	<b>ANNULUS</b>		<b>PRESSURE</b>			
0 minutes	<u>14</u>	psig		psig		psig
5 minutes	<u>1770</u>	psig		psig		psig
10 minutes	<u>1770</u>	psig		psig		psig
15 minutes	<u>1770</u>	psig		psig		psig
20 minutes	<u>1770</u>	psig		psig		psig
25 minutes	<u>1770</u>	psig		psig		psig
30 minutes	<u>1775</u>	psig		psig		psig
_____ minutes		psig		psig		psig
_____ minutes		psig		psig		psig
<b>RESULT</b>	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail

Does the annulus pressure build back up after the test ?  Yes  No

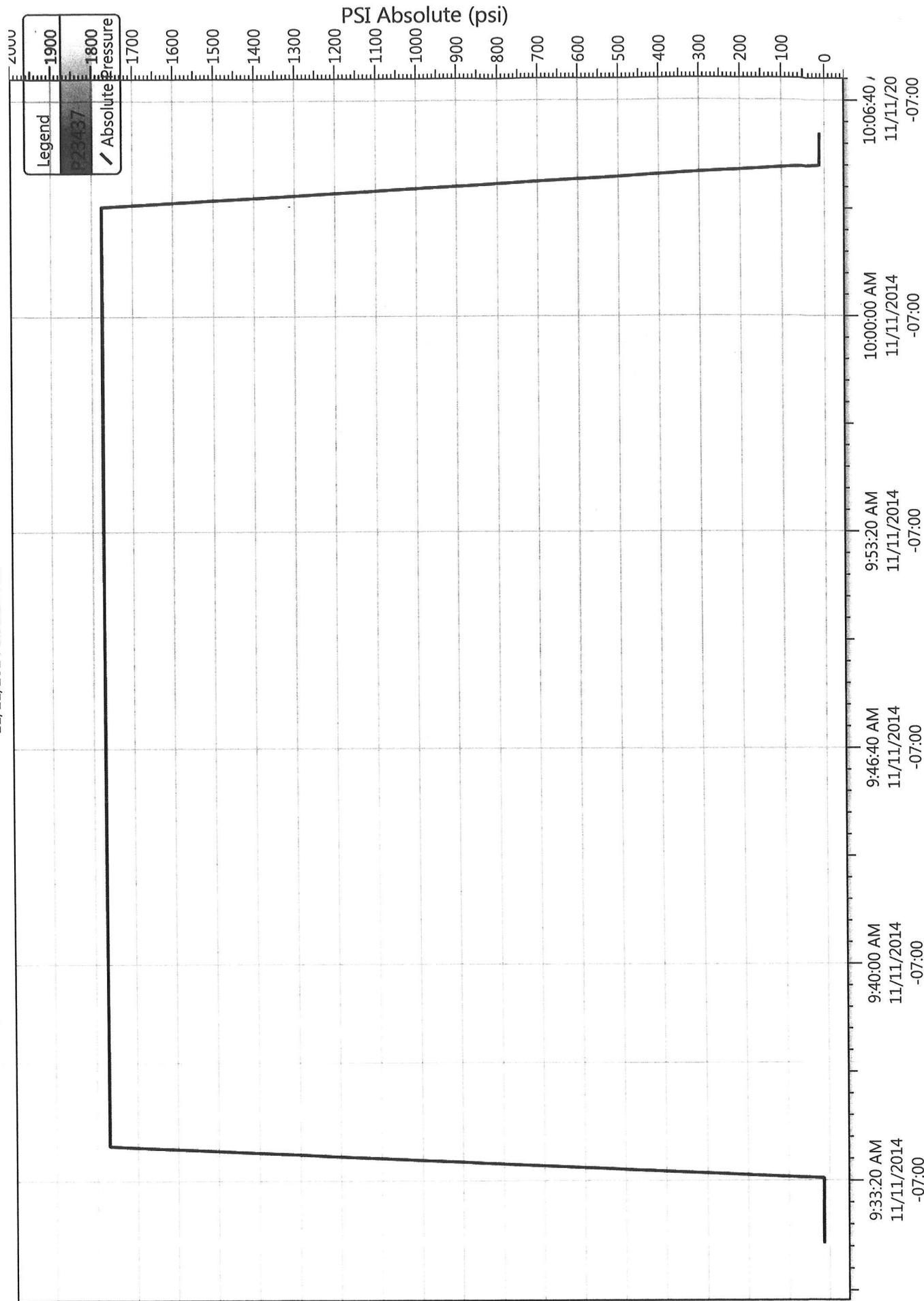
## MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: \_\_\_\_\_

tar sands federal 3-31-8-17 5 ye

11/11/2014 9:31:19 AM



# Tar Sands Federal 3-31-8-17

Spud Date: 7/8/97 Put on  
Production: 8/11/97 GL:  
5283' KB: 5296'

Initial Production: 61 BOPD,  
133 MCFPD, 7 BWPD

### SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (296.30')  
DEPTH LANDED: 294.56'(GL)  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 120 sxs Premium cmt, est 5 bbls cmt to surf

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 144 jts. (6033.86')  
DEPTH LANDED: 6075.54'  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 340 sk HiBond mixed & 320 sxs thixotropic  
CEMENT TOP AT: 977' per CBI

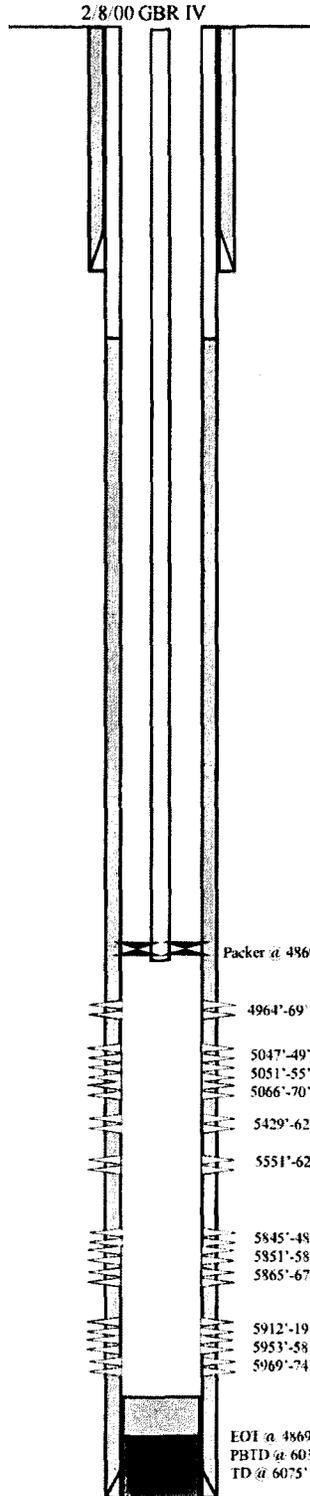
### TUBING

SIZE/GRADE/WT: 2-7/8"/6.5#/M-50 tbg  
NO. OF JOINTS: 172 jts.  
TUBING ANCHOR:  
SEATING NIPPLE: 2-7/8" (1.10")  
TOTAL STRING LENGTH: EOT @ 4869'  
SN LANDED AT: 4866'

### SUCKER RODS

POLISHED ROD:  
SUCKER RODS:  
TOTAL ROD STRING LENGTH:  
PUMP NUMBER:  
PUMP SIZE:  
STROKE LENGTH:  
PUMP SPEED, SPM:  
LOGS:

### Injection Wellbore Diagram



### FRAC JOB

8/2/97 5845'-5974' Frac CP-2 & CP-4 sands as follows:  
109,400# of 20/40 sand in 573 bbls of  
Boragel. Brokedown @ 2609 psi Treated  
@ avg rate of 31.4 w/avg pressure of  
1300 psi. ISIP-1912 psi. 5-min 1358 psi.  
Flowback on 12.64' ck for 2-1/2 hours  
until dead.

8/5/97 5429'-5562' Frac A-3 & LODC sands as follows:  
106,000# of 20/40 sand in 550 bbls of  
Boragel. Broke down @ 2630 psi.  
Treated w/avg press of 1500 psi @ avg  
rate of 30.5 bpm. ISIP 1851 psi. 5-min  
1740 psi, 10-min 1512 psi, 15-min 1443  
psi. Start Flowback after 5-min SI @ 1  
bpm until dead.

8/7/97 4964'-5070' Frac C & D-2 sands as follows:  
107,100# of 20/40 sand in 510 bbls of  
Boragel. Breakdown @ 2043 psi. Treated  
@ avg rate of 27.5 bpm w/avg press of  
2270 psi. ISIP-3261 psi, 5-min SI: 3141  
psi. Flowback @ 1 bpm until dead

01/27/05 5 Year MIT  
12/02/09 5 YR MIT

### PERFORATION RECORD

Date	Depth Range	Number of Holes	Perforation Type
8-1-97	5845'-5848'	4	JSPF 12 holes
8-1-97	5851'-5858'	4	JSPF 28 holes
8-1-97	5865'-5867'	4	JSPF 8 holes
8-1-97	5912'-5919'	4	JSPF 28 holes
8-1-97	5953'-5958'	4	JSPF 20 holes
8-1-97	5969'-5974'	4	JSPF 20 holes
8-5-97	5429'-5462'	2	JSPF 66 holes
8-5-97	5551'-5562'	4	JSPF 44 holes
8-6-97	4964'-4969'	4	JSPF 20 holes
8-6-97	5047'-5049'	4	JSPF 32 holes
8-6-97	5051'-5055'	4	JSPF 16 holes
8-6-97	5066'-5070'	4	JSPF 16 holes



Tar Sands Federal #3-31  
771 FNL 1978 FWL  
NENW Section 31-T8S-R17E  
Duchesne Co, Utah  
API #43-013-31733; Lease #U-74869