

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

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK  
**DRILL**  **DEEPEN**

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

2. NAME OF OPERATOR  
**J-W Operating Company**

3. ADDRESS AND TELEPHONE NO.  
**P.O. Box 305 Wray, CO 80758 970-332-3151**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface **752' FNL, 1,637' FFL, NW/4 NF/4, Section 23**  
 At proposed prod. zone **660' FSL, 660' FWL, SW/4 SW/4, Section 23**

14. DISTANCE IN MILES AND DIRECTI  
**16 miles Northeast of Wellington, Utah**

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) **360'**  
 16. NO. OF ACRES IN LEASE **1360**

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. **None**  
 19. PROPOSED DEPTH **7285' 7410'**

21. ELEVATIONS (Show whether DF, RT, GR, etc.) **7387' GR**  
 22. APPROX. DATE WORK WILL START\* **Sept 1, 2004**

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" J-55 ST&C	36	340'	90 sacks Neat at 1.18 cubic ft/sack, 15.2 lbs./gal.
8-3/4"	7" J-55 LT&C	20	3630'	213 sacks API Class G at 1.34 cubic ft/sack, 14.8 lbs./gal
6-1/8"	4-1/2" J-55 /LS	10.5	4884'	Production Liner

*Handwritten notes:* Surf. 529513 X 39.76670, 4401711 Y -110.69543, BHL 528642 X 39.75599, 4400519 Y -110.66565

Surface Owner: **Iriart Family Partnership, LTD 503 E. 100 N., Price Utah 84501**  
 Surface Representative: **Bernie Iriart, 435-637-6610**

Federal Bond Number: **Pending**  
 Fee Bond Number: **RLB 0004156**

**RECEIVED  
AUG 02 2004**

DIV. OF OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data 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 *James Johnson* **Larry W. Johnson** TITLE **Agent for J-W Operating** DATE **July 30, 2004**

(This space for Federal or State office use)  
 PERMIT NO. **43-007-30994** 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:

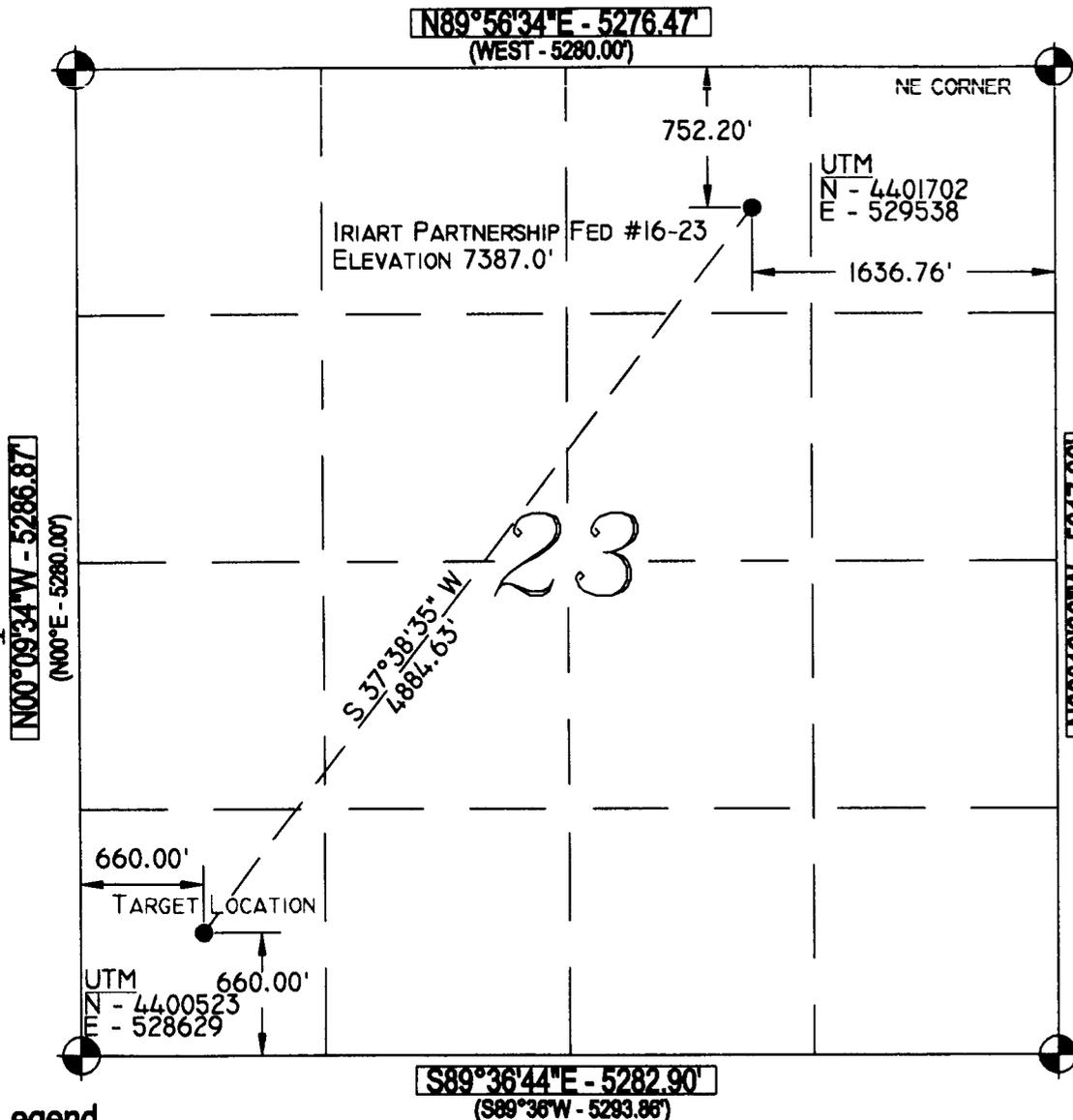
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

**\*See Instructions On Reverse Side**

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

# Range 11 East

Township 12 South



**Location:**  
THE WELL LOCATION WAS DETERMINED USING A TRIMBLE 4700 GPS SURVEY GRADE UNIT.

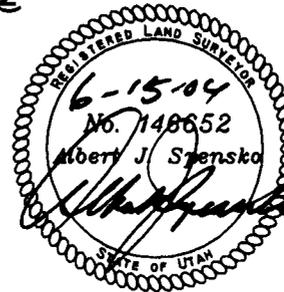
**Basis of Bearing:**  
THE BASIS OF BEARING IS GPS MEASURED.

**GLO Bearing:**  
THE BEARINGS INDICATED ARE PER THE RECORDED PLAT OBTAINED FROM THE U.S. LAND OFFICE.

**Basis of Elevation:**  
BASIS OF ELEVATION OF 7611.00' BEING AT THE SOUTHEAST SECTION CORNER OF SECTION 23, TOWNSHIP 12 SOUTH, RANGE 11 EAST, SALT LAKE BASE AND MERIDIAN, AS SHOWN ON THE MINNIE MAUD CREEK WEST QUADRANGLE 7.5 MINUTE SERIES MAP.

**Description of Location:**  
**SURFACE LOCATION**  
PROPOSED DRILL HOLE LOCATED IN THE NW1/4 NE1/4 OF SECTION 23, T12S, R11E, S.L.B.&M., BEING 752.20' SOUTH AND 1636.76' WEST FROM THE NORTHEAST CORNER OF SECTION 23, T12S, R11E, SALT LAKE BASE & MERIDIAN.  
**TARGET LOCATION**  
PROPOSED TARGET LOCATED IN THE SW1/4 SW1/4 OF SECTION 23, T12S, R11E, S.L.B.&M., BEING 660.00' NORTH AND 660.00' EAST FROM THE SOUTH AND WEST LINES OF SECTION 23, T12S, R11E, SALT LAKE BASE & MERIDIAN.

**Surveyor's Certificate:**  
I, ALBERT J. SPENSKO, A REGISTERED PROFESSIONAL LAND SURVEYOR, HOLDING CERTIFICATE 146652 STATE OF UTAH, DO HEREBY CERTIFY THAT THE INFORMATION ON THIS DRAWING IS A TRUE AND ACCURATE SURVEY BASED ON DATA OF RECORD AND WAS CONDUCTED UNDER MY PERSONAL DIRECTION AND SUPERVISION AS SHOWN HEREON.



**TALON RESOURCES, INC.**  
195 North 100 West P.O. Box 1280  
Huntington, Utah 84528  
Phone (435)687-5310 Fax (435)687-5311  
E-Mail talonres@net



Iriart Partnership Fed #16-23  
Section 23, T12S, R11E, S.L.B.&M.  
Carbon County, Utah

## Legend

- Drill Hole Location
- ⊕ Brass Cap (Found)
- Brass Cap (Searched for, but not found)
- △ Rock Pile
- ( ) GLO
- GPS Measured

**NOTES:**  
1. UTM AND LATITUDE / LONGITUDE COORDINATES ARE DERIVED USING A GPS PATHFINDER AND ARE SHOWN IN WGS 84 DATUM.

**SURFACE LOCATION**

LAT / LONG
39°45'60"N
110°39'19"W

**TARGET LOCATION**

LAT / LONG
39°45'22"N
110°39'57"W

**GRAPHIC SCALE**



( IN FEET )

1 inch = 1000 ft.

Drawn By: N. BUTKOVICH	Checked By: L.W.J./A.J.S.
Drawing No. A-1	Date: 06/03/04
	Scale: 1" = 1000'
Sheet 1 of 1	Job No. 1363

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

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK  
 DRILL  DEEPEN

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

2. NAME OF OPERATOR  
J-W Operating Company.

3. ADDRESS AND TELEPHONE NO.  
P.O. Box 305 Wray, CO 80758 970-332-3151

4. LOCATION OF WELL. (Report location clearly and in accordance with any State requirements.)\*  
 At surface 752' FNI., 1.637' FEI. NW/4 NF/4. Section 23  
 At proposed prod. zone 660' FSL, 660' FWL SW/4 SW/4, Section 23

14. DISTANCE IN MILES AND DIRECTI  
16 miles Northeast of Wellington, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 360'  
 16. NO. OF ACRES IN LEASE 1360

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. None  
 19. PROPOSED DEPTH MD 7285'

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 7387' GR  
 17. NO. OF ACRES ASSIGNED TO THIS WELL 160 acres  
 20. ROTARY OR CABLE TOOLS Rotary

22. APPROX. DATE WORK WILL START\* Sept 1, 2004

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" J-55 ST&C	36	340'	90 sacks Neat at 1.18 cubic ft/sack, 15.2 lbs./gal.
8-3/4"	7" J-55 LT&C	20	3630'	213 sacks API Class G at 1.34 cubic ft/sack, 14.8 lbs./gal
6-1/8"	4-1/2" J-55 /LS	10.5	4884'	Production Liner

Surf. 529513 X 39.76670 BHL 528642 X 39.75599  
 4401711 Y -110.65543 4400519 Y -110.66565

Surface Owner: **Iriart Family Partnership, LTD 503 E. 100 N., Price Utah 84501**  
 Surface Representative: **Bernie Iriart, 435-637-6610**

Federal Bond Number: **Pending**  
 Fee Bond Number: **RLB 0004156**

**RECEIVED  
AUG 02 2004**

DIV. OF OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data 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 Larry W. Johnson TITLE Agent for J-W Operating DATE July 30, 2004

(This space for Federal or State office use)  
 PERMIT NO. 43-007-30994 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:

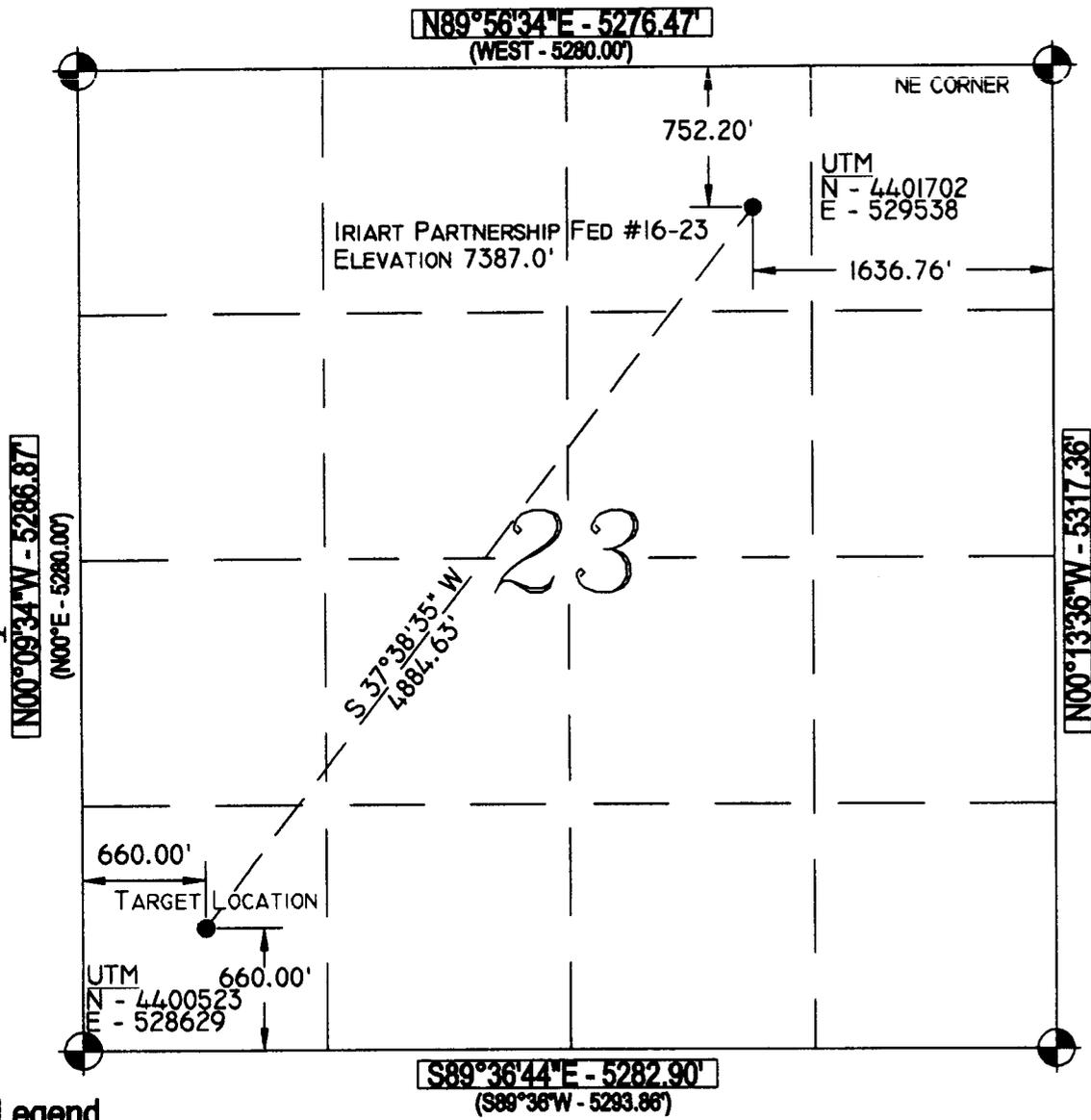
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

**\*See Instructions On Reverse Side**

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

# Range 11 East

Township 12 South



## Legend

- Drill Hole Location
- ⊕ Brass Cap (Found)
- Brass Cap (Searched for, but not found)
- △ Rock Pile
- ( ) GLO
- GPS Measured

## NOTES:

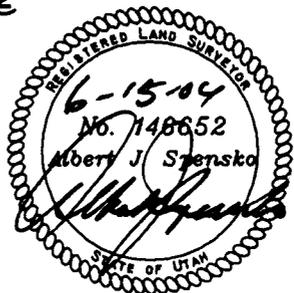
1. UTM AND LATITUDE / LONGITUDE COORDINATES ARE DERIVED USING A GPS PATHFINDER AND ARE SHOWN IN WGS 84 DATUM.

### SURFACE LOCATION

**LAT / LONG**  
39°45'60"N  
110°39'19"W

### TARGET LOCATION

**LAT / LONG**  
39°45'22"N  
110°39'57"W



**Location:**  
THE WELL LOCATION WAS DETERMINED USING A TRIMBLE 4700 GPS SURVEY GRADE UNIT.

**Basis of Bearing:**  
THE BASIS OF BEARING IS GPS MEASURED.

**GLO Bearing:**  
THE BEARINGS INDICATED ARE PER THE RECORDED PLAT OBTAINED FROM THE U.S. LAND OFFICE.

**Basis of Elevation:**  
BASIS OF ELEVATION OF 7611.00' BEING AT THE SOUTHEAST SECTION CORNER OF SECTION 23, TOWNSHIP 12 SOUTH, RANGE 11 EAST, SALT LAKE BASE AND MERIDIAN, AS SHOWN ON THE MINNIE MAUD CREEK WEST QUADRANGLE 7.5 MINUTE SERIES MAP.

**Description of Location:**  
**SURFACE LOCATION**  
PROPOSED DRILL HOLE LOCATED IN THE NW1/4 NE1/4 OF SECTION 23, T12S, R11E, S.L.B.8M., BEING 752.20' SOUTH AND 1636.76' WEST FROM THE NORTHEAST CORNER OF SECTION 23, T12S, R11E, SALT LAKE BASE & MERIDIAN.

**TARGET LOCATION**  
PROPOSED TARGET LOCATED IN THE SW1/4 SW1/4 OF SECTION 23, T12S, R11E, S.L.B.8M., BEING 660.00' NORTH AND 660.00' EAST FROM THE SOUTH AND WEST LINES OF SECTION 23, T12S, R11E, SALT LAKE BASE & MERIDIAN.

## Surveyor's Certificate:

I, ALBERT J. SPENSKO, A REGISTERED PROFESSIONAL LAND SURVEYOR, HOLDING CERTIFICATE 148652 STATE OF UTAH, DO HEREBY CERTIFY THAT THE INFORMATION ON THIS DRAWING IS A TRUE AND ACCURATE SURVEY BASED ON DATA OF RECORD AND WAS CONDUCTED UNDER MY PERSONAL DIRECTION AND SUPERVISION AS SHOWN HEREON.

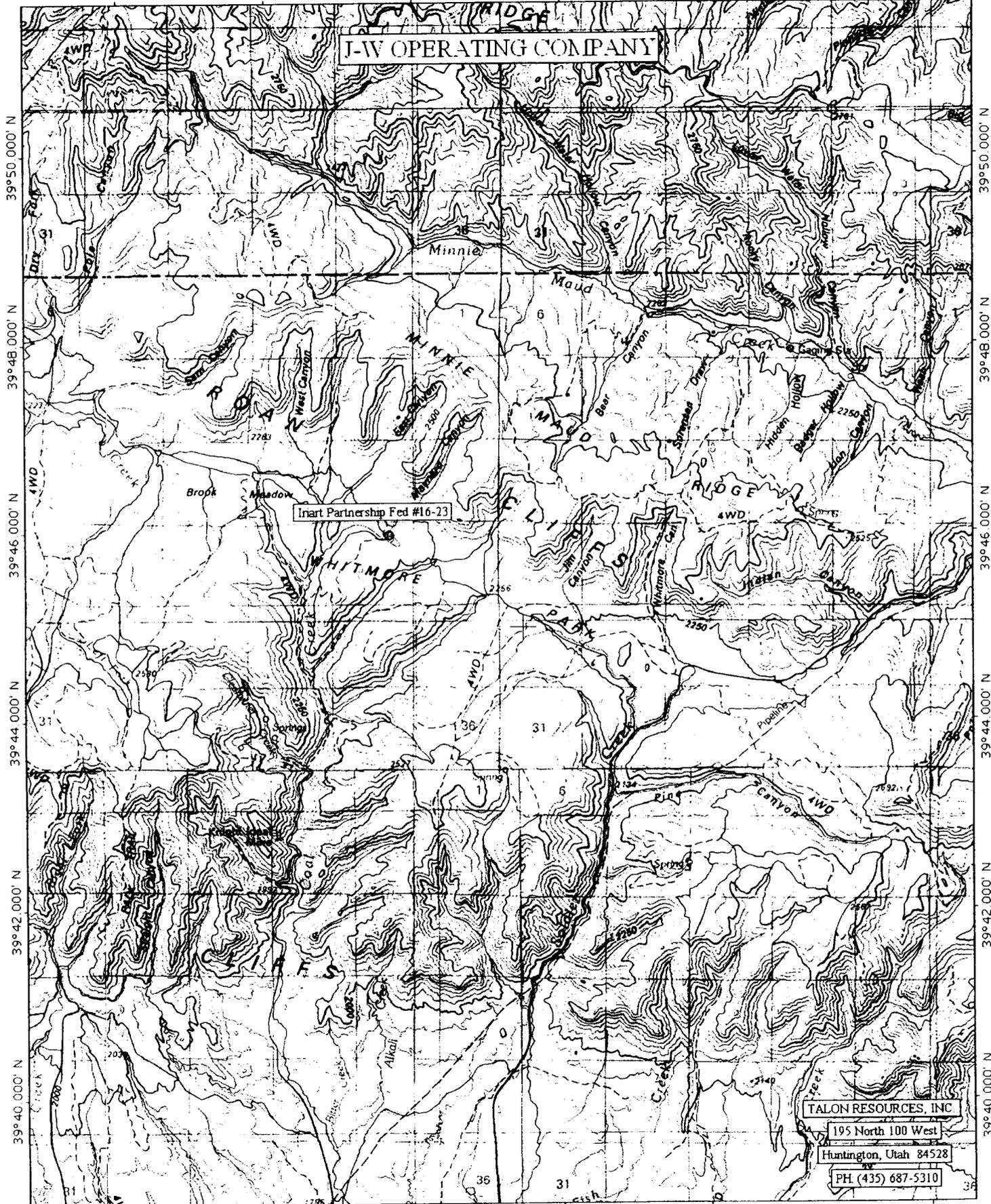
**TALON RESOURCES, INC.**  
195 North 100 West P.O. Box 1230  
Huntington, Utah 84528  
Phone (435)687-5310 Fax (435)687-5311  
E-Mail talonnetv.net



Iriart Partnership Fed #16-23  
Section 23, T12S, R11E, S.L.B.&M.  
Carbon County, Utah

Drawn By: N. BUTKOVICH	Checked By: L.W.J./A.J.S.
Drawing No. A-1	Date: 06/03/04
	Scale: 1" = 1000'
Sheet 1 of 4	Job No. 1363





I-W OPERATING COMPANY

Inart Partnership Fed #16-23

TALON RESOURCES, INC  
 195 North 100 West  
 Huntington, Utah 84528  
 PH (435) 687-5310

**DIVISION OF OIL, GAS AND MINING  
APPLICATION FOR PERMIT TO DRILL  
STATEMENT OF BASIS**

**OPERATOR:** JW Operating  
**WELL NAME & NUMBER:** Iriart Partnership Fed 16-23  
**API NUMBER:** \_\_\_\_\_  
**LOCATION:** 1/4,1/4 NWNE Sec:23 TWP: 12 S RNG: 11 E 741 FNL 1742 FEL

**Geology/Ground Water:**

The Federal Government is the owner of the mineral rights for the proposed well. The BLM will be the responsible agency for reviewing and approving the drilling, casing and cementing program.

**Reviewer:** Brad Hill                      **Date:** 12/28/04

**Surface:**

Proposed location is ~16 miles northeast of Wellington, in the Emma/Whitmore Park Area of Carbon County, Utah. The immediate area surrounding the proposed well is grazing and wildlife habitat. Access to this well will be along existing County maintained roads and upgraded two-track roads. Approximately .17 mile of new access road will be built for this location. The direct area drains to the south, eventually making its way into Coal Creek. Dry washes are common throughout the area. A floodplain runs through the east side of the proposed location. A flood control berm has been constructed several years ago to direct this floodplain to the east. Do not disturb the existing flood control berm on the east side of the location. Access will be along an existing two-track on the west side of the proposed location. The pad will be bermed and the reserve pit will be lined. Bernie Iriart was invited to the on-site however chose not to attend. Carbon County was in attendance for this on-site. Carbon County was interested in the road traffic and watershed.

**Reviewer:** Mark L. Jones                      **Date:** December 22, 2004

**Conditions of Approval/Application for Permit to Drill:**

1. A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.
2. Do not disturb the existing flood control berm on the east side of the location.
3. A fence shall be placed around the reserve pit on all four sides to keep wildlife and livestock out.
4. The pad shall be bermed

**ON-SITE PREDRILL EVALUATION**  
**Division of Oil, Gas and Mining**

OPERATOR: JW Operating  
WELL NAME & NUMBER: Iriart Partnership Fed 16-23  
API NUMBER: 43-007-30996  
LEASE: Fed FIELD/UNIT: \_\_\_\_\_  
LOCATION: 1/4,1/4 NWNE Sec: 23 TWP: 12S RNG: 11E 741 FNL 1742 FEL  
LEGAL WELL SITING: Horizontal well.  
GPS COORD (UTM): X= 529502 E; Y= 4401704 N SURFACE OWNER: Iriart Family.

**PARTICIPANTS**

M. Jones (DOGM), Larry Johnson (TALON), Gayla Williams (Carbon County),  
Randy Edlin (JW-O).

**REGIONAL/LOCAL SETTING & TOPOGRAPHY**

Proposed location is ~16 miles northeast of Wellington, in the Emma/Whitmore Park Area of Carbon County, Utah. The immediate area surrounding the proposed well is grazing and wildlife habitat. Access to this well will be along existing County maintained roads and upgraded two-track roads. Approximately .17 mile of new access road will be built for this location. The direct area drains to the south, eventually making its way into Coal Creek. Dry washes are common throughout the area.

**SURFACE USE PLAN**

CURRENT SURFACE USE: Grazing and wildlife habitat.

PROPOSED SURFACE DISTURBANCE: 201' x 260' w/ 145' x 75' x 8' pit.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: No wells are within a 1 mile radius of the above proposed well.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: On location and along roadway.

SOURCE OF CONSTRUCTION MATERIAL: Obtained locally and trucked to site.

ANCILLARY FACILITIES: None anticipated.

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS?  
(EXPLAIN): None foreseeable.

**WASTE MANAGEMENT PLAN:**

Portable chemical toilets will be emptied into the municipal waste treatment system; garbage cans on location will be emptied into centralized dumpsters, which will be emptied into an approved landfill. Drilling fluid, and completion/frac fluid will be removed from the pit upon completion of the well. Cuttings will be buried in the pit unless

oil based mud is used. If oil based mud is used disposal of the cuttings should be discussed with the Division. Used oil from drilling operations and support will be hauled to a used oil recycling facility. Produced water will be disposed of at an approved facility.

#### ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: Dry washes are common throughout the immediate area of the proposed well location. A floodplain runs through the east side, as staked for the on-site, of the proposed location. A flood control berm has been constructed to direct this floodplain to the east. The well should be moved west, ~100', to avoid disturbing this flood control berm.

FLORA/FAUNA: Sagebrush, rabbit brush, grasses, elk, deer, rodents, fowl.

SOIL TYPE AND CHARACTERISTICS: Clay loam.

SURFACE FORMATION & CHARACTERISTICS: Colton Formation

EROSION/SEDIMENTATION/STABILITY: Erosive upon disturbance.

PALEONTOLOGICAL POTENTIAL: None observed.

#### RESERVE PIT

CHARACTERISTICS: Dugout earthen, 145'x75'x8', included w/in location.

LINER REQUIREMENTS (Site Ranking Form attached): Liner required.

#### SURFACE RESTORATION/RECLAMATION PLAN

As per surface use agreement.

SURFACE AGREEMENT: Signed.

CULTURAL RESOURCES/ARCHAEOLOGY: Has been completed since this well has Federal mineral interests.

#### OTHER OBSERVATIONS/COMMENTS

Carbon County was interested in the road traffic. The well pad was planned to cut through the flood control berm and place a portion of the pad in the floodplain. I requested that the well and pad be moved west, ~100', to not damage the flood berm and place the pad out of the floodplain. I also requested that the road not cut across the floodplain as designed, and that it utilize an existing two-track for accessing the pad on the west side. I then suggested that the pad could be turned 180 degrees to facilitate the drill rig better.

#### ATTACHMENTS

Photos of this location were taken and placed on file.

Mark L. Jones  
DOGM REPRESENTATIVE

October 13, 2004 / 1:15 pm  
DATE/TIME

**Evaluation Ranking Criteria and Ranking Scale  
For Reserve and Onsite Pit Liner Requirements**

<u>Site-Specific Factors</u>	<u>Ranking</u>	<u>Site Ranking</u>
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	<u>0</u>
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	<u>0</u>
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	20	<u>0</u>
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	<u>0</u>
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	<u>20</u>
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid	15	
containing significant levels of hazardous constituents	20	<u>10</u>
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	<u>0</u>
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	<u>5</u>
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	<u>0</u>
Presence of Nearby Utility Conduits		
Not Present	0	
Unknown	10	
Present	15	<u>0</u>

**Final Score**      35      (Level I Sensitivity)

Sensitivity Level I = 20 or more; total containment is required, consider criteria for excluding pit use.

Sensitivity Level II = 15-19; lining is discretionary.

Sensitivity Level III = below 15; no specific lining is required.





**STATE ACTIONS**  
**Governor's Office of Planning and Budget**  
**Resource Development Coordinating Committee**  
**P.O. Box 145610**  
**1594 W. North Temple, Suite 3710**  
**SLC, UT 84114-5610**  
**538-5535**

<b>1. Administering State Agency</b> Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801	<b>2. Approximate date project will start:</b>  Upon Approval or September 1, 2004
<b>3. Areawide clearinghouse(s) receiving state action:</b> (to be sent out by agency in block 1)  Southeastern Utah Association of Governments	
<b>4. Type of action:</b> // Lease /X/ Permit // License // Land Acquisition  // Land Sale // Land Exchange // Other _____	
<b>5. Title of proposed action:</b>  Application for Permit to Drill	
<b>6. Description:</b>  J-W Operating Company proposes to drill the Iriart Partnership Fed 16-23 well (wildcat) on Federal lease Surface location UTU-80904 Bottom Hole Location UTU-73890, Carbon County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.	
<b>7. Land affected (site location map required) (indicate county)</b> – include UTM coordinates where possible Surface Location 752' FNL 1637' FEL, NW/4 NE/4, Bottom Hole Location 660' FSL 660' FWL, SW/4 SW/4, Section 23, Township 12 South, Range 11 East, Carbon County, Utah	
<b>8. Jordan River Natural Areas Forum review – If the proposed action affects lands within the Jordan River Natural Areas Corridor.</b> N/A	
<b>9. Has the local government(s) been contacted?</b> No If yes, a. How was contact made? b. Who was contacted? c. What was the response? d. If no response, how is the local government(s) likely to be impacted?	
<b>10. Possible significant impacts likely to occur:</b>  Degree of impact is based on the discovery of oil or gas in commercial quantities.	
<b>11. Name and phone of district representative from your agency near project site, if applicable:</b>  N/A	
<b>12. For further information, contact:</b>   Diana Whitney Phone: (801) 538-5312	<b>13. Signature and title of authorized officer</b>   John R. Baza, Associate Director Date: August 10, 2004

**From:** Rand Fisher  
**To:** Diana Whitney  
**Date:** 8/16/2004 3:49:13 PM  
**Subject:** RDCC Project numbers 4383, 4384, 4385, 4386

43-007-30996

RE: Project numbers 4383, 4384, 4385, 4386

Sponsor: Division of Oil, Gas and Mining  
SLB&M: Sec. 25, T12S, R11E  
Counties Affected: Carbon  
Description: Application for Permit to Drill - proposal to drill a wildcat well the Iriart Partnership Fed 14-25 well, on Federal lease UTU-80905  
Comments Due to Sponsor 08/26/2004

The Division of Oil, Gas, and Mining is considering a request for oil, gas, and hydrocarbon exploration and development. Many such leases have in the past been issued on state, federal, and private lands within Utah. Reviewing experiences with some of those mineral leases shows significant problems resulting in road washouts, inaccessibility to well sites for service, gullying, and excessive erosion are avoided when appropriate management practices are implemented in construction of roads and well sites.

The Price, Utah Field Office, US Bureau of Land Management has developed Hydrologic Modification Standards for Roads which have been required for several years. Leasers have found that while meeting the requirements requires a slightly higher initial expense in road construction, costs to maintain the roadways are significantly reduced. And leasers find that compared with other roads, roads constructed to these standards remain much more accessible and useful through unfavorable weather conditions and seasons. With this experience, some leasers now implement the standards even where they are not required.

To protect the natural resources of Utah, to protect water quality, reduce erosion, improve accessibility and longevity of roadways, and to reduce long term costs for road maintenance, our office recommends and strongly advises that provisions similar to the Price Field Office Hydrologic Modification Standards for Roads (copied below) be included in all future mineral leases offered through the Division of Oil, Gas, and Mining.

Many leases or permits for such roads and pipelines have in the past been issued on state, federal, and private lands within Utah. Reviewing experiences with some of those mineral leases shows significant problems have sometimes occurred resulting in road washouts, inaccessibility to well sites for service, gullying, and excessive erosion. Such problems can be minimized when appropriate management practices are implemented in construction of roads and well sites.

Price Field Office -  
Hydrologic Modification Standards for Roads  
K. Flood - Hydrologist  
Updated October 14, 2003

I. Surface Water Channel Crossing Criteria:

- (1) Crossings which require a CWA-404 or GP-40 channel alteration permit, as determined by the Utah Division of Water Rights, are to be engineered if they are part of a federal Right of Way permit application.
- (2) Channel crossings requiring culverts with individual or cumulative diameters of 30 inches or greater are to be engineered, and sized to the 25 year, 6 hour event at a minimum.

A. The commonly used sizing equations for culverts or other flow conveyances might not be reliable if there are no local precipitation stations from which to obtain accurate values. Isohyets are generated from

available data. Often, the isohyet values given for remote areas have large errors associated with them. In such cases, run-off and stream flows should be obtained from hydrographs if available, measured directly if possible, or estimated based on channel dimension measurements.

(3) Wherever possible, roads should be aligned perpendicular to channels at crossings.

(4) Crossings on perennial channels which require structures or channel modification, including bank disturbance, are to be engineered. Crossings on intermittent and ephemeral channels may require engineering on a case by case basis.

(5) Culverts should connect a channel at existing points on both sides of the road. Realignment of channels is strongly discouraged. If realignment is the only option, engineering shall be done to ensure channel parameters are preserved as described in I. (6) A, B, and C.

(6) Engineered designs will ensure that crossings do not cause changes to the existing channel parameters as follows:

A. Cross Sectional Dimensions: Changes to the cross sectional dimensions of a channel destabilize streams. An altered channel often undergoes a series of undesirable changes before restabilizing. Significant widening and downcutting can occur, followed by the formation of a new channel within the widened area. This process results in significant soil loss, degrading water quality. Local ground water levels are often lowered, which can cause changes in vegetation.

1. width, as measured at bankfull level: Factors which influence width are:

a. flow velocity: Velocity of flow exiting the crossing must equal velocity of flow entering the crossing. Where culverts are used, a >V= shaped flow guide (i.e., wing walls) should be installed at the inlet. At the outlet, a >U= shaped guide should be used to return flow to the original width, depth, and velocity. Also see criteria I. (6) A. 1. d. and I. (6) A. 2. b.

b. flow magnitude: Avoid changes in flow magnitude within the channel. Where a flood plain is present, flows from the flood plain must not be converged with channel flow. Each flood plain must be reestablished at the crossing outlet, with flow discharged at the same velocity, width, and depth as found immediately upstream of the inlet. Where culverts are used, the flood plains should have individually sized culverts, and each must be properly placed. Combination culvert/low-water crossings may be used, allowing flood level flows to go over the road. The same principles apply, differences in flow velocity on the flood plains must be considered in crossing designs. See I. (6) A. 2. a. and I. (6) A. 2. b.

c. size and type of transported sediment: Avoid creating changes in sediment load via use of erosion controls during construction and by replacing vegetation as soon after construction as possible.

d. bed and bank materials: Introduced bed and/or bank materials should have a friction coefficient similar to that of the natural channel, except where specifically designed to adjust flow velocity, and must be installed so as to withstand high flows and floods without dislodging.

2. depth, as measured from thalweg to bankfull level: The practice of installing culverts at a slope less than the natural channel bed slope to adjust flow velocity should be discontinued if changes to channel depth are to be avoided. This would also serve to reduce head at the inlet which can occur from the flow velocity change caused by the difference in culvert slope and bed slope.

a. Culverts should generally be installed with approximately ten percent of the diameter below the channel bed, provided rock or concrete aprons are included at the inlet and outlet, each flush with the original bed surface. Unless the bed is armored, both the inlet and the outlet must be installed at the existing bed level. Exceptions to this may be prescribed to reverse a preexisting downcutting problem without incurring additional costs.

b. Adjust flow velocity using an energy dissipating rock apron at the outlet.

#### B. Stream Channel Patterns:

1. radius of curvature: The following equation gives a relationship for the radius of curvature of meander bends to meander length and sinuosity.

$$R = L_m K^{1.5} / 13(K-1)^{0.5}$$

where: R = radius of curvature

L<sub>m</sub> = meander length

K = sinuosity

and:  $K = L_c / L_v$ ; which may be approximated by  $m_v / m_c$

where: L<sub>c</sub> = channel length

L<sub>v</sub> = valley length

m<sub>v</sub> = valley slope

m<sub>c</sub> = channel slope

This relationship shows that parameters of a realignment can be made to mimic natural pattern geometry by adjusting channel slope and length within the realignment reach. It is necessary to design channel pattern changes (realignments) using the correct radius of curvature to avoid causing repercussions to the cross sectional dimensions. However, realignments should be made only if there are no alternatives. See I. (6) C. 1.

a. In cases where a channel must be realigned, the radius of curvature of the new alignment must equal the radius of curvature of the natural meander of the channel.

2. width/variable width, as a function of depth:

a. Width at bankfull of the new reach must equal width at bankfull of the original reach.

b. Banks must be contoured with the same slope as the original banks.

#### C. Stream Channel Profile:

1. slope of the channel bed: The bed slope is the single most sensitive physical parameter of a channel. When the bed slope changes, most or all other parameters of the pattern and cross sectional dimensions will change.

a. If possible, choose a crossing location low on the watershed, where the ground is relatively flat. See criteria I. (6) A. 2. a. and I. (6) A. 2. b.

2. pool-riffle ratio: At higher elevations in a watershed, the bed slope is generally greater and the channel is usually straighter (lower sinuosity). To compensate for low sinuosity, step pools and riffles develop at more frequent intervals. Pools occur where the bed slope is flatter, and riffles occur where the slope increases. Also, water seeps into the ground at pools, and discharges from the ground into the channel at riffles. If structures are built on riffles, water seepage could cause extensive damage and present potential safety risks.

a. Cross channels at pools, not at riffles.

b. Where roads must cross at riffles, in-seepage of water must be addressed in the design.

II. Road Drainage Criteria: Roads which run perpendicular to hill slopes act as berms, capturing sheet flow from runoff and snowmelt and converting it into channel flow along the road. This diverts water from areas immediately downslope of the road, which can cause undesirable changes in vegetation. Ditches which are typically built along roads to transport this channelized runoff are often discharged at the nearest existing wash, stream channel or low point on the terrain. Where this discharge occurs at a channel crossing (usually the downstream side of the crossing) severe erosion frequently results. Channels are significantly widened below such crossings, appearing as blown out. See Criteria 1. (6) A. 1. b. Also, road ditches often create severe erosion gullies by headcutting back from the wash. Where roads run parallel to channels, ditched runoff is often discharged or turned-out toward the channel at low points along the road. This frequently results in erosive headcuts forming from the channel to the road. This erosion degrades water quality, can destabilize the receiving channel, often erodes the road surface, and can block access along a channel. The type of damage described can be minimized or prevented with little additional cost incurred.

(1) Road drainage flow should not be converged with existing channel flow.

(2) Ditch turnouts should be made along the road at locations where terrain is fairly level along the road, and which slopes gently away from the road.

(3) Turnouts should be equipped with gravel or rock aprons at each outlet. The apron should:

A. expand outward away from the outlet for a distance sufficient to disperse channel flow from the ditch back into sheet flow

B. reduce flow velocity enough to prevent rill formation.

(4) Turnouts should be placed as needed to avoid transferring water from one drainage basin or subbasin to another, and to effect as complete a return to the original flow regime as practical. Spacing criteria as specified in the Class III road standards used by the PFO are the minimum standard.

III. Miscellaneous Construction Phase Criteria:

(1) For activities which disturb one (1) or more acres, a Storm Water Pollution Prevention Plan (SWPPP) must be submitted to the Utah Department of Environmental Quality.

(2) The Best Management Practices (BMPs) set forth in the Utah Nonpoint Source Management Plan for Hydrologic Modifications, Appendix B., page 3 should be implemented as applicable.

(3) In the event construction can't be completed prior to winter closures, measures to prevent erosion from upcoming spring snowmelt should be taken as follows:

A. Loose earth and debris must be removed from drainages, and flood plains.

B. Earth and debris should not be stockpiled on drainage banks

C. Road drainages should be checked to ensure there are none with uncontrolled outlets.

1. Be sure all ditch drainages have an outlet to prevent ponding.

2. If necessary, build temporary sediment ponds to capture runoff from unreclaimed areas.

3. Re-route ditches as needed to avoid channeling water through loosened soil.

# SOUTHEASTERN UTAH ASSOCIATION OF LOCAL GOVERNMENTS

DREW SITTERUD  
CHAIRMAN

WILLIAM D. HOWELL  
EXECUTIVE DIRECTOR



375 SOUTH CARBON AVE.  
P.O. DRAWER 1106  
PRICE, UTAH 84501  
(435) 637-5444  
FAX (435) 637-5448

## AREA WIDE CLEARINGHOUSE REVIEW

Federal Action \_\_\_\_\_ State Action   x   Approved (  ) Yes (  ) No

Other (indicate) \_\_\_\_\_

### Applicant Address:

Oil, Gas & Mining

1594 West North Temple #1210

SLC, UT 84114-5801

Name and phone number Diana Whitney 801-538-5312

Title/Project Description Application for Permit to Drill - Four wells are proposed in the  
Whitmore Park area of Carbon County.

- [  ] No Comment  
[  ] See comment below

Comments: Approved on 8/19/04 at SEUAOG Executive Board Meeting.

Lorraine Benford  
SEUALG

8/19/04  
DATE

RECEIVED  
AUG 24 2004



The State of Utah

Department of  
Natural Resources

Division of  
Wildlife Resources

MICHAEL O. LEAVITT  
*Governor*

OLENE S. WALKER  
*Lieutenant Governor*

24 August, 2004

Diana Whitney  
Division of Oil, Gas, and Mining  
1594 West N. Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, UT 84114-5801

ROBERT L. MORGAN  
*Executive Director*

KEVIN K. CONWAY  
*Division Director*

Subject: RDCC # 4383, 4384, 4385, and #4386, Whitmore Park Federal Lease Wells

Dear Ms. Whitney;

In regards to the subject action, the Utah Division of Wildlife Resources has the following comments.

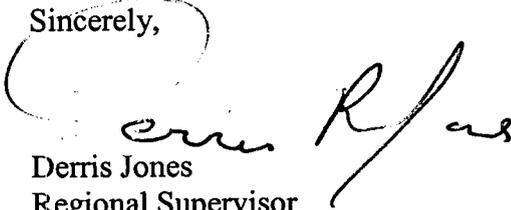
These wells are located in critical northern sage grouse year-round habitat including nesting and brood rearing areas. The northern sage-grouse has been petitioned for listing under the Endangered Species Act, and should this listing occur, there will be serious restrictions on activities on private, federal, and state lands. Therefore, we urge any person or agency interested keeping land use options open to observe all seasonal restriction and distance buffers needed to maintain existing populations. Access to Critchlow Federal 17-17 passes through a sage-grouse lek. We are concerned that improper development and maintenance of these wells could negatively affect sage grouse populations in this area. Barker Trust Federal 15-26 is located in critical summer mule deer range. Infrastructure footprint and construction activity at this well could also negatively impact mule deer reproduction.

We recommend on-the-ground activity related to development of these sites be restricted to July 6 through March 19. This seasonal restriction will prevent most disturbances to both sage grouse and big game. After wells go into production, we recommend there be no traffic to Critchlow Federal 17-17 before 9AM during March 20 through May 10. This will prevent disruption of sage grouse lekking activities.

Thank-you for the opportunity to review and comment on this proposed action. If you have any questions, please contact Tony Wright, oil and gas mitigation biologist, at our Price office, (435) 636-0267.

RECEIVED  
SEP 01 2004  
DIV. OF OIL, GAS & MINING

Sincerely,

A handwritten signature in cursive script, appearing to read "Derris Jones". The signature is written in black ink and is positioned to the right of the typed name.

Derris Jones  
Regional Supervisor

Administration  
Habitat Section-Mike Canning  
GOPB- Carolyn Wright

TALON RESOURCES INC

RECEIVED  
DEC 27 2004  
DIV. OF OIL, GAS & MINING

December 21, 2004

Mrs. Diana Whitney  
State of Utah  
Division of Oil Gas and Mining  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Request for Exception to State Spacing Rule at target zone penetration—

Iriart Partnership Federal 16-23 Sect 23 T12S R11E SLB&M Carbon County Utah  
Surface: 741' FNL, 1742.1 FEL  
Target: 1125' FNL, 2025' FEL

Dear Ms. Whitney:

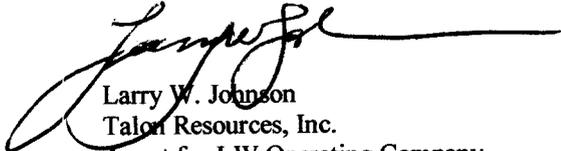
On behalf of J-W Operating Company, Talon Resources, Inc. respectfully submits the following information for the above referenced wells.

**Request for exception to spacing (state spacing rules) based on topography.**

**J-W Operating Company is the only owner and operator within 460' of the proposed well locations.**

Thank you for your timely consideration of this request. Please feel free to contact me or Mr. Randy Edelen of JWO at 1-970-332-3843 if you have any questions or need additional information.

Sincerely,



Larry W. Johnson  
Talon Resources, Inc.  
Agent for J-W Operating Company

cc. Ms. Ginny Burchard, J-W Operating  
Mr. Robert Eller, J-W Operating  
Mr. Randy Edelen, J-W Operating

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

DIV. OF OIL, GAS & MINING

5. LEASE DESIGNATION AND SERIAL NO.  
Surface UTU80904 BHL UTU73890

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
N/A

1a. TYPE OF WORK

DRILL  DEEPEN

7. UNIT AGREEMENT NAME  
N/A

b. TYPE OF WELL  
OIL WELL  GAS WELL  OTHER

SINGLE ZONE  MULTIPLE ZONE

8. FARM OR LEASE NAME, WELL NO.  
Iriart Partnership Fed 16-23

2. NAME OF OPERATOR

J-W Operating Company

9. API WELL NO.  
43-007-30996

3. ADDRESS AND TELEPHONE NO.

P.O. Box 305 Wray, CO 80758 970-332-3151

10. FIELD AND POOL, OR WILDCAT  
Undesignated

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

741' FNI., 1742' FFI. NW/4 NE/4, Section 23

11. SEC., T., R., M., OR BLK  
A Section 23 T12S R11E

At proposed prod. zone

660' FSL, 660' FWL SW/4 SW/4, Section 23

SLB&M

14. DISTANCE IN MILES AND DIRECTION

16 miles Northeast of Wellington, Utah

12. COUNTY OR PARISH  
Carbon

13. STATE  
Utah

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

460'

16. NO. OF ACRES IN LEASE

1360

17. NO. OF ACRES ASSIGNED TO THIS WELL

160 acres

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

None

19. PROPOSED DEPTH

7410'

20. ROTARY OR CABLE TOOLS

Rotary

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

7385' GR

22. APPROX. DATE WORK WILL START\*

April 15, 2005

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" J-55 ST&C	36	340'	90 sacks Neat at 1.18 cubic ft/sack, 15.2 lbs./gal.
8-3/4"	7" J-55 ST&C	20	3630'	213 sacks API Class G at 1.34 cubic ft/sack, 14.8 lbs./gal
6-1/8"	4-1/2" J-55 /LS	10.5	4332'	Production Liner

529488X 39.766737  
Surf 4401715Y -110.655718

Surface Owner:  
Surface Representative:

Iriart Family Partnership, LTD 503 E. 100 N., Price Utah 84501  
Bernie Iriart, 435-637-6610

Federal Bond Number:  
Fee Bond Number:

Pending  
RLB 0004156

UTB0000142 BHL 528628X 39.755920  
4400511Y -110.665821

Federal Approval of this  
Action is Necessary

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data 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 Larry W. Johnson TITLE Agent for J-W Operating

DATE DEC. 21, 2004

(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 Bradley G. Hill TITLE ENVIRONMENTAL MANAGER

DATE 03-05-07

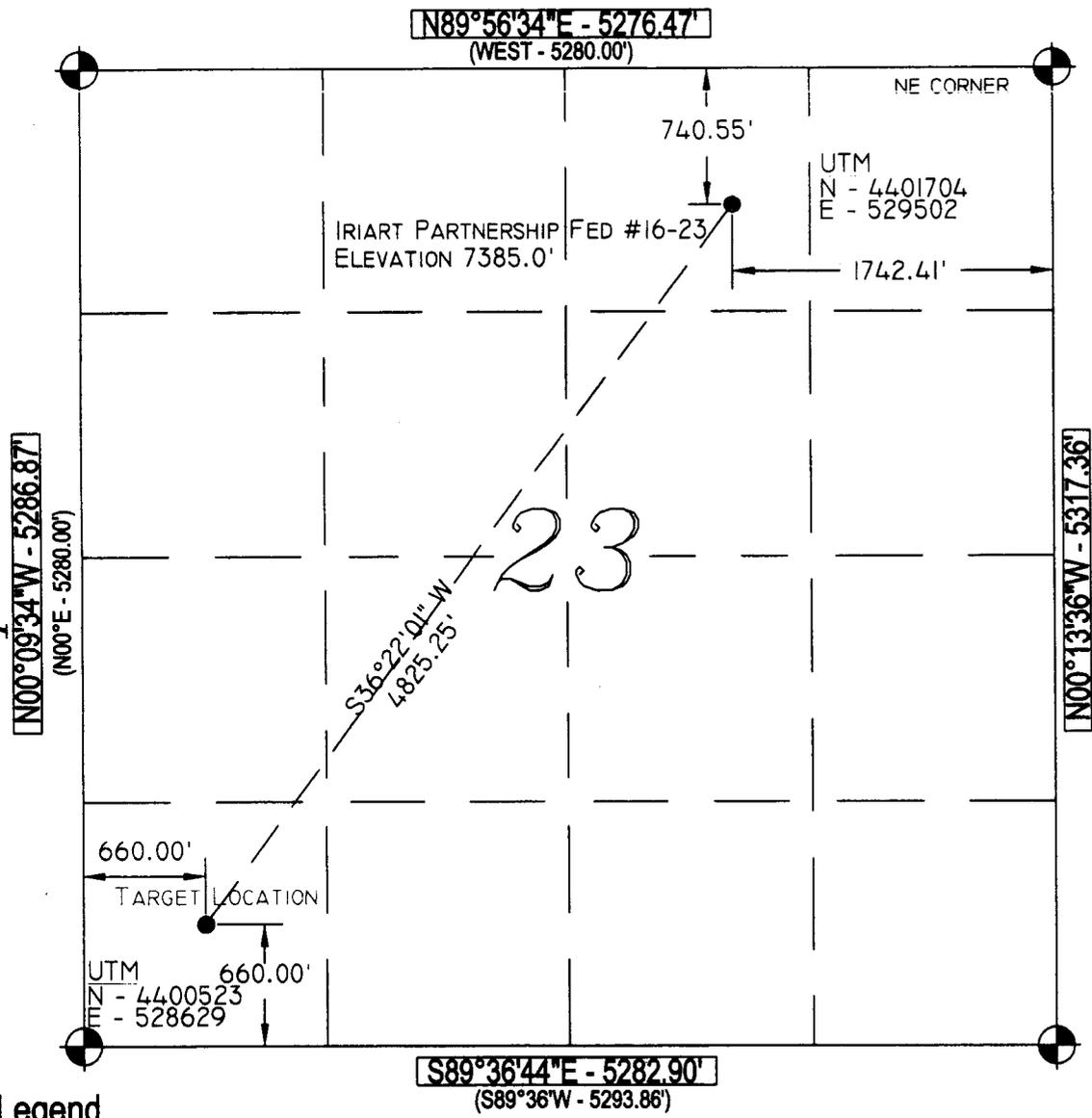
\*See Instructions On Reverse Side

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

CONFIDENTIAL

Township 12 South

Range 11 East



**Location:**  
THE WELL LOCATION WAS DETERMINED USING A TRIMBLE 4700 GPS SURVEY GRADE UNIT.

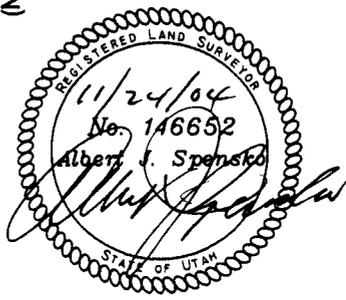
**Basis of Bearing:**  
THE BASIS OF BEARING IS GPS MEASURED.

**GLO Bearing:**  
THE BEARINGS INDICATED ARE PER THE RECORDED PLAT OBTAINED FROM THE U.S. LAND OFFICE.

**Basis of Elevation:**  
BASIS OF ELEVATION OF 7611.00' BEING AT THE SOUTHEAST SECTION CORNER OF SECTION 23, TOWNSHIP 12 SOUTH, RANGE 11 EAST, SALT LAKE BASE AND MERIDIAN, AS SHOWN ON THE MINNIE MAUD CREEK WEST QUADRANGLE 7.5 MINUTE SERIES MAP.

**Description of Location:**  
SURFACE LOCATION  
PROPOSED DRILL HOLE LOCATED IN THE NW1/4 NE1/4 OF SECTION 23, T12S, R11E, S.L.B.&M., BEING 740.55' SOUTH AND 1742.41' WEST FROM THE NORTHEAST CORNER OF SECTION 23, T12S, R11E, SALT LAKE BASE & MERIDIAN.  
TARGET LOCATION  
PROPOSED TARGET LOCATED IN THE SW1/4 SW1/4 OF SECTION 23, T12S, R11E, S.L.B.&M., BEING 660.00' NORTH AND 660.00' EAST FROM THE SOUTH AND WEST LINES OF SECTION 23, T12S, R11E, SALT LAKE BASE & MERIDIAN.

**Surveyor's Certificate:**  
I, ALBERT J. SPENSKO, A REGISTERED PROFESSIONAL LAND SURVEYOR, HOLDING CERTIFICATE 146652 STATE OF UTAH, DO HEREBY CERTIFY THAT THE INFORMATION ON THIS DRAWING IS A TRUE AND ACCURATE SURVEY BASED ON DATA OF RECORD AND WAS CONDUCTED UNDER MY PERSONAL DIRECTION AND SUPERVISION AS SHOWN HEREON.



**TALON RESOURCES, INC.**  
195 North 100 West P.O. Box 1230  
Huntington, Utah 84528  
Phone (435)687-5310 Fax (435)687-5311  
E-Mail talon@etv.net

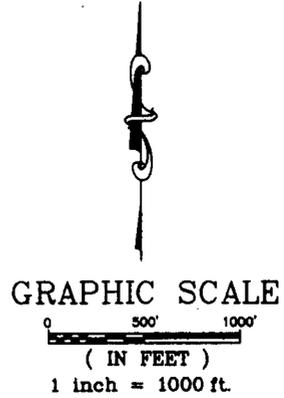
Irriart Partnership Fed #16-23  
Section 23, T12S, R11E, S.L.B.&M.  
Carbon County, Utah

Drawn By: J. STANSFIELD	Checked By: L.W.J./A.J.S.
Drawing No. A-1	Date: 11/18/04
	Scale: 1" = 1000'
Sheet 1 of 4	Job No. 1533

- Legend**
- Drill Hole Location
  - ⊕ Brass Cap (Found)
  - Brass Cap (Searched for, but not found)
  - △ Rock Pile
  - ( ) GLO
  - GPS Measured

**NOTES:**  
1. UTM AND LATITUDE / LONGITUDE COORDINATES ARE DERIVED USING A GPS PATHFINDER AND ARE SHOWN IN WGS 84 DATUM.

<b>SURFACE LOCATION</b>	<b>TARGET LOCATION</b>
LAT / LONG 39°46'00"N 110°39'20"W	LAT / LONG 39°45'22"N 110°39'57"W





## 8 POINT DRILLING PROGRAM

Exhibit "D"

Attached to BLM Form 3  
J-W Operating Company

### **Iriart Partnership Federal 16-23**

*Surface Location:* 741' FNL, 1742' FEL, NW/4 NE/4, Sec. 23, T12S, R11E, SLB&M

*Target Location:* 660' FSL, 660' FWL, SW/4 SW/4, Sec. 23, T12S, R11E, SLB&M

Carbon County, Utah

December 10, 2004

#### 1. The Geologic Surface Formation

Tertiary Colton Formation

#### 2. Estimated Tops of Important Geologic Markers

Castlegate	2,291'
Blackhawk	2,580'
Sunnyside	2,770'
Gilson	3,000'
Kenilworth	3,050'

#### 3. Projected Gas & H2O zones (Sunnyside Coals)

Upper Sunnyside Coals      2,640 – 2,647'

Groundwater may be encountered within the Tertiary Colton Formation. Water encountered will be reported on a Form 7 "Report of Water Encountered During Drilling".

Casing & cement will be utilized to protect potentially productive hydrocarbons, lost circulation zones, abnormal pressure zones, and prospectively valuable mineral deposits. All indications of usable water will be reported.

Surface casing will be tested to 500 psi.

*Kick off point is 2,800', Bottom of the Castlegate, (measured depth)*

*Build Rate is 12 degrees per hundred feet*

*Horizontal Displacement = 552', HD @ Incidence = 447'*

*Location of wellbore at target zone penetration      1,124.7' FNL, 2,025.2' FEL*

**CONFIDENTIAL**

4. The Proposed Casing and Cementing Programs

<u>HOLE SIZE</u>	<u>SETTING DEPTH (INTERVAL)</u>	<u>SIZE (OD)</u>	<u>WEIGHT, GRADE &amp; JOINT</u>	<u>CONDITION</u>
12-1/4"	340'	9-5/8"	36# J-55 ST&C	New
8-3/4"	3,630'	7"	20# J-55 ST&C	New

Cement Program - Actual Anticipated top = 1730'

**Only the surface casing will be cemented back to surface.**

Surface Casing: 90 sacks Neat  
Weight: 15.2 #/gal  
Yield: 1.18 cu.ft/sk

Production Casing: 213 sacks API Class G;  
Weight: 14.8 #/gal,  
Yield: 1.34 cu.ft/sk yield.

The following shall be entered in the driller's log:

- 1) Blowout preventer pressure tests, including test pressures and results;
- 2) Blowout preventer tests for proper functioning;
- 3) Blowout prevention drills conducted;
- 4) Casing run, including size, grade, weight, and depth set;
- 5) How the pipe was cemented, including amount of cement, type, whether cement circulated, location of the cementing tools, etc.;
- 6) Waiting on cement time for each casing string;
- 7) Casing pressure tests after cementing, including test pressures and results.

5. The Operator's Minimum Specifications for Pressure Control

Exhibit "G" is a schematic diagram of the blowout preventer equipment. A double gate 2000 psi BOP will be used. This equipment will be tested to 1000 psi. All tests will be recorded in a Driller's Report Book. Physical operation of BOP's will be checked on each trip.

**CONFIDENTIAL**

6. The Type and Characteristics of the Proposed Circulating Muds

- 0-340'      12-1/4" hole    Drill with water based fluid.  
 340'-3,630'    8-3/4" hole    Drill with water based fluid.  
 3,630'-TD    6-1/8" hole    Drill with Production Water

	<u>Type of Mud</u>	<u>Weight</u>	<u>Interval</u>	
	Spud Mud	8.6	Surface-340'	Bentonite for Viscosity
	Fresh Water	8.3	340-2200	
Fresh Water	Low Solids Non-Dispersed	8.4-8.7	2200-Casing Depth	Bentonite for Viscosity

7. The Testing, Logging and Coring Programs are as followed

340-TD      focused gamma ray.

Any Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well. Bottom hole pressure expected to be under 2000 psi. No hydrogen sulfide or other hazardous gases or fluids have been found, reported or are known to exist at these depths in the area.

8. Anticipated Starting Date and Duration of the Operations.

The well will be drilled approx.: April 15, 2005.

Verbal and/or written notifications listed below shall be submitted in accordance with instructions from the Division of Oil, Gas & Mining:

- (a) prior to beginning construction;
- (b) prior to spudding;
- (c) prior to running any casing or BOP tests;
- (d) prior to plugging the well, for verbal plugging instructions.

Spills, blowouts, fires, leaks, accidents or other unusual occurrences shall be reported to the Division of Oil, Gas & Mining immediately.



## 13 POINT SURFACE USE PLAN

### Exhibit "E"

Attached to BLM Form 3

J-W Operating Company

**Iriart Partnership Federal 16-23**

*Surface Location:* 741' FNL, 1742' FEL, NW/4 NE/4, Sec. 23, T12S, R11E, SLB&M

*Target Location:* 660' FSL, 660' FWL, SW/4 SW/4, Sec. 23, T12S, R11E, SLB&M

Carbon County, Utah

December 10, 2004

#### **a. Existing Roads**

- a. The proposed access road will tie to the existing Whitmore road, a Carbon County road. Approval to maintain the existing encroachment to the county road is presently being obtained from the Carbon County Road Department (see Exhibit "B")
- b. The use of this road under Carbon County Road Department maintenance is necessary through the private lands falling on both sides of said road.
- c. There are no plans to change, alter or improve upon any other existing state or county roads. The Whitmore road will be maintained in the same or better condition.

#### **2. Planned Access**

Approximately 600 feet of new lease access will be required (See Exhibit "B"). Access is determined by acquired Right of way by the surface owner.

- a. Maximum Width: 20' Travel Surface with a 24' Base.
- b. Maximum Grade: 12%
- c. Turnouts: None
- d. In the Drainage Design: 1 – 18" culvert will be required along this stretch of road. Water will be diverted away from the planned access as necessary and practical

- e. If the well is productive, the road will be surfaced and maintained as necessary to prevent soil erosion and accommodate year round traffic.

### **3. Location of Existing Wells**

- a. There are no proposed wells within a one mile radius (see Exhibit "B").

### **4. Location of Existing and/or Proposed Facilities**

- a. If the well is a producer, installation of production facilities will follow.
- b. Power lines and gathering lines, when installed, will follow the proposed access roads and tie-in to existing power and pipelines.
- c. Rehabilitation of all pad areas not used for production facilities will be made in accordance with landowner stipulations.

### **5. Location and Type of Water Supply**

- a. Produced water from nearby wells will be utilized for drilling and completion. If this water source is inadequate water will be obtained from a local water source through direct purchase (probably Price River Water Improvement District, a local source of municipal water).
- b. Water will be transported by truck over approved access roads.
- c. No water well is to be drilled for this location.

### **6. Source of Construction Materials**

- a. All necessary construction materials needed will be obtained locally and hauled to the location on existing roads.
- b. No construction or surfacing materials will be taken from Federal/Indian land.

### **7. Methods for handling waste disposal**

- a. Since the well will be drilled with a water based fluid, a reserve pit will be constructed with a minimum of one-half the total depth below the original ground surface on the lowest point within the pit. The pit will be lined. Three sides of the reserve pit will be fenced within 24 hours after completion of construction and the fourth side within 24

hours after drilling operation cease with four strands of barbed wire, or woven wire topped with barbed wire to a height of not less than four feet. The fence will be kept in good repair while the pit is drying.

- b. Following drilling, the liquid waste will be evaporated from the pit and the pit backfilled and returned to natural grade. No liquid hydrocarbons will be discharged to the reserve pit or pad location
- c. In the event fluids are produced, any oil will be retained in tankage until sold and any water produced will be retained until its quality can be determined. The quality and quantity of the water will determine the method of disposal.
- d. Trash will be contained in a portable metal container and will be hauled from location periodically and disposed of at an approved disposal site. Chemical toilets will be placed on location and sewage will be disposed of at an appropriate disposal site.

#### **8. Ancillary Facilities**

- a. We anticipate no need for ancillary facilities with the exception of camp trailers to be located on the drill site.

#### **9. Wellsite Layout**

- a. The well, whether drilling, producing, suspended, or abandoned, will be properly identified in accordance with 43 CFR 3162.6.
- b. Access to the well pad will be from the North and East.
- c. Available topsoil will be removed from the location and stockpiled. The location of mud tanks, reserve pits, and soil stockpiles will be located as shown on Exhibit "C".
- d. Natural runoff will be diverted around the well pad.

#### **10. Plans for Restoration of Surface**

- a. All surface areas not required for producing operations will be graded to as near original condition as possible and recontoured to minimize possible erosion.
- b. Available topsoil will be stockpiled and will be evenly distributed over the disturbed

areas and the area will be reseeded as prescribed by the landowner.

- c. Pits and any other area that would present a hazard to wildlife or livestock will be fenced off when the rig is released and removed.
- d. Any oil accumulation on the pit will be removed or overhead flagged as dictated by the existing conditions.
- e. Rehabilitation will commence following completion of the well. Rat and mouse holes will be filled immediately upon release of the drilling rig from the location. If the wellsite is to be abandoned, all disturbed areas will be recontoured.

#### **11. Surface Ownership**

- a. The wellsite will be constructed on lands owned by the Iriart Family Partnership, LTD; 503 East 100 North, Price, Utah 84501. Bernie Iriart is the surface representative and can be reached at (435) 637-6610. Surface use is presently in place with Iriart and will be submitted under separate cover to the Division of Oil, Gas and Mining. The operator shall contact the landowner and the Division of Oil, Gas and Mining 48 hours prior to beginning construction activities.

#### **12. Other Information:**

- a. The primary surface use is grazing. Nearest live water is SoldierCreek approximately 2 miles Southeast.
- b. If there is snow on the ground when construction begins, it will be removed before the soil is disturbed, and piled downhill from the topsoil stockpile location.
- c. The backslope and foreslope will be constructed no steeper than 4:1.
- d. All equipment and vehicles will be confined to the access road and well pad.
- e. A complete copy of the approved Application for Permit to Drill (APD) including conditions and stipulations, shall be at the well site during construction and drilling operations.
- f. There will be no deviation from the proposed construction, drilling, and/or workover program without prior approval from the Division of Oil, Gas & Mining.

13. **Company Representatives**

Robert Eller – Production Engineer  
J-W Operating Company  
P.O. Box 305  
Wray, Colorado 80758

(970) 332-3151 office  
(970) 597-0019 mobile  
(970) 332-5821 fax

**Mail Approved A.P.D. To:**

Company Representative

**Excavation Contractor**

Shane Campbell – owner/operator  
Scamp Excavation  
1555 West 750 South  
Wellington, Utah 84542

(435) 636-8101 office  
(435) 650-9876 mobile

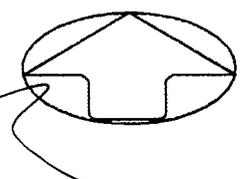
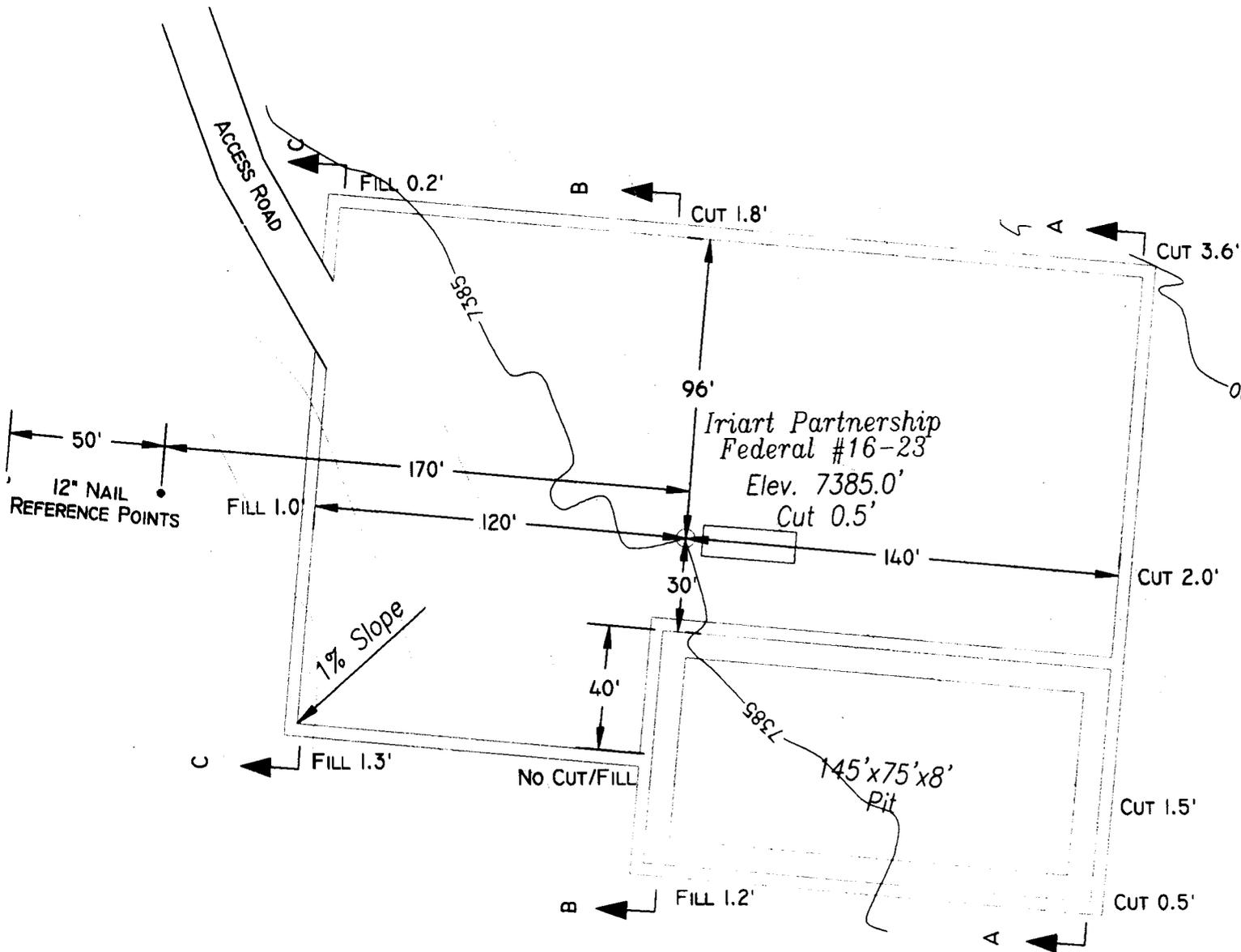
14. **Certification**

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

12/21/04  
Date

  
Larry W. Johnson for J-W Operating Co.

ELEVATION OF UNGRADED GROUND AT LOCATION STAKE = 7385.0'  
 ELEVATION OF GRADED GROUND AT LOCATION STAKE = 7384.5'

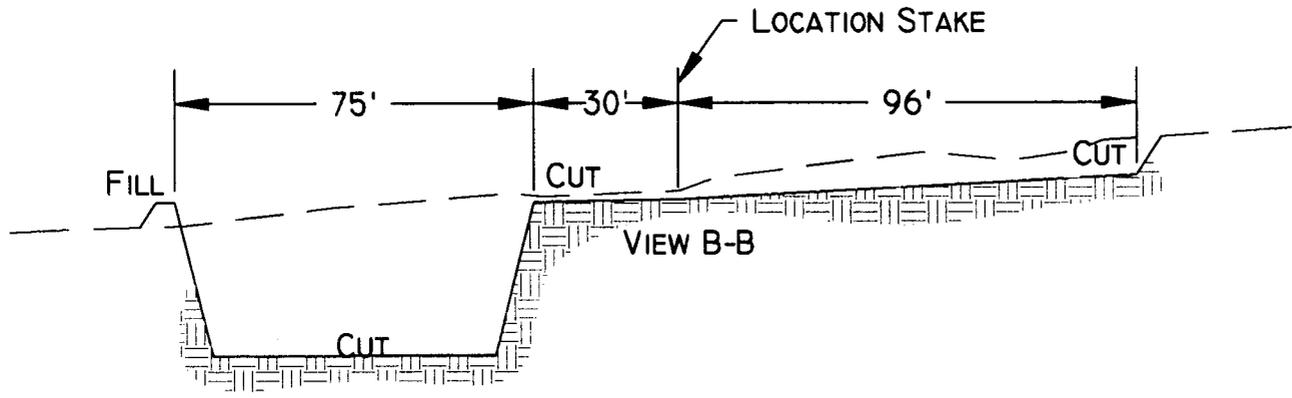
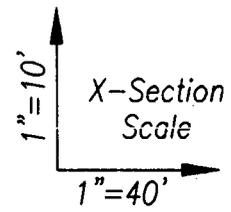
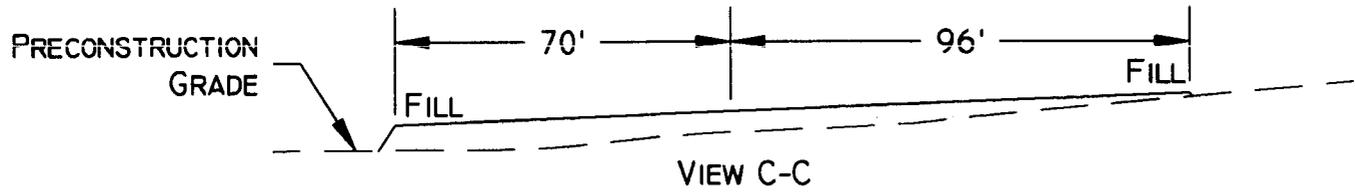


Talon Resources, Inc.  
 195 North 100 West P.O. Box 1230  
 Huntington, Utah 84528  
 Phone (435)687-5310 Fax (435)687-5311  
 E-Mail talon@rtv.net

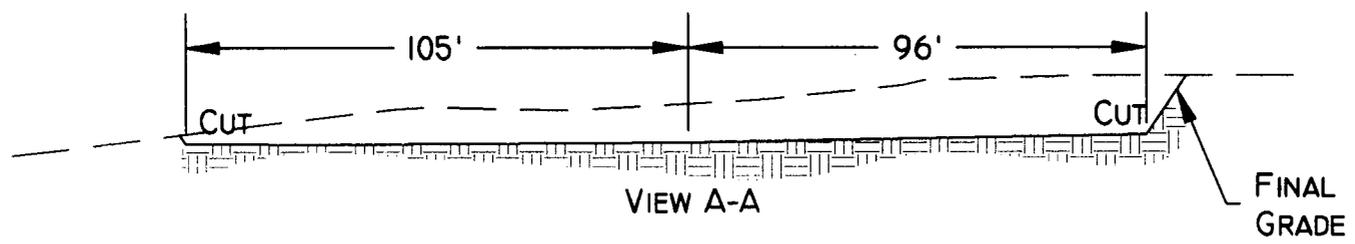


LOCATION LAYOUT  
 Section 23, T12S, R11E, S.L.B.&M.  
 Iriart Partnership Fed #16-23

Drawn By: J. STANSFIELD	Checked By: L.W.J.
Drawing No. A-2	Date: 11/18/04
	Scale: 1" = 50'
Sheet 2 of 4	Job No. 1533



SLOPE = 1 1/2 : 1  
(EXCEPT PIT)  
PIT SLOPE = 1 ; 1



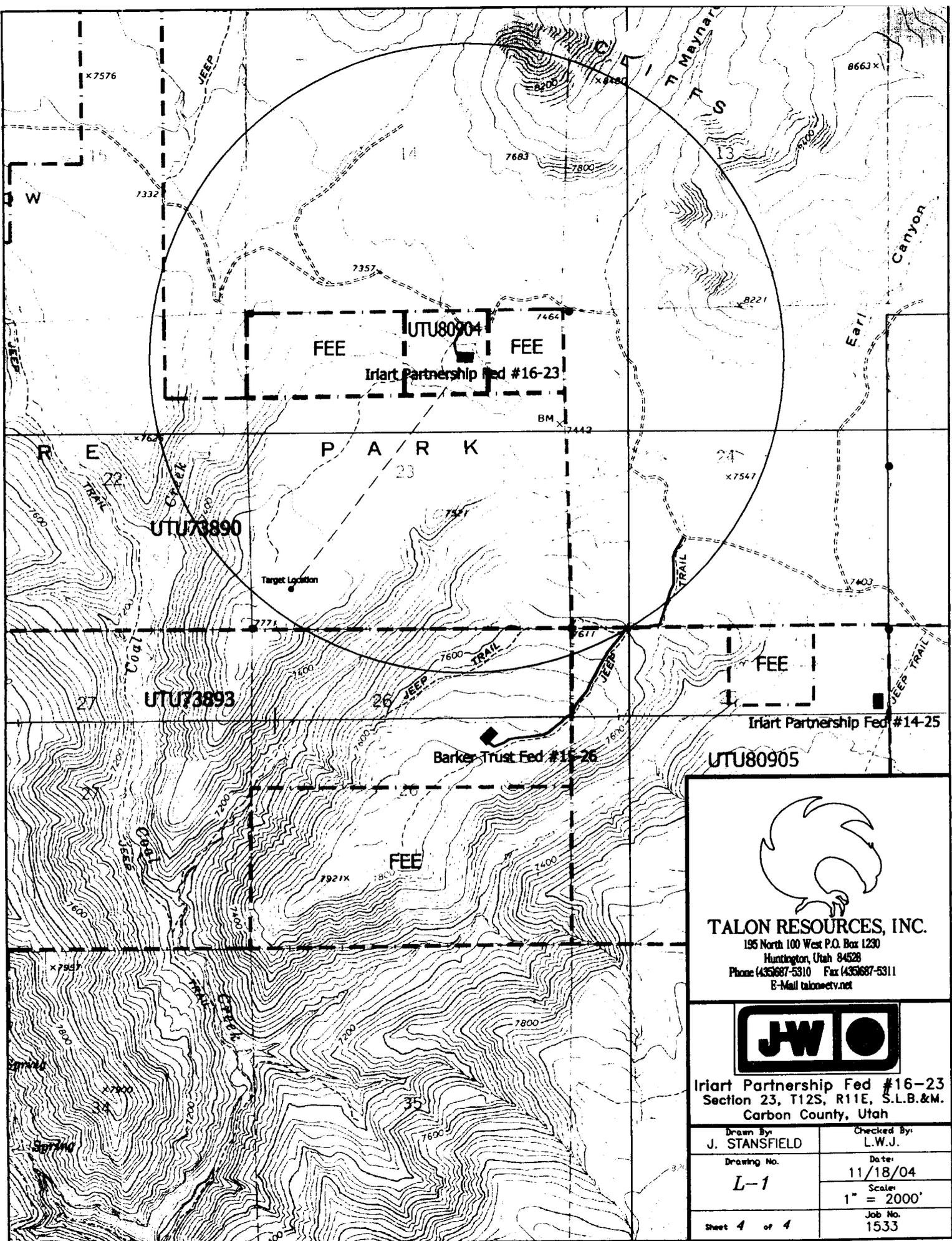
Talon Resources, Inc.  
195 North 100 West P.O. Box 1230  
Huntington, Utah 84528  
Phone (435)687-5310 Fax (435)687-5311  
E-Mail talon@rtv.net



TYPICAL CROSS SECTION  
Section 23, T12S, R11E, S.L.B.&M.  
Iriart Partnership Fed #16-23

Drawn By: J. STANSFIELD	Checked By: L.W.J.
Drawing No. C-1	Date: 11/18/04
	Scale: 1" = 40'
Sheet 3 of 4	Job No. 1533

APPROXIMATE YARDAGES  
CUT  
(6")TOPSOIL STRIPPING = 750 CU. YDS.  
REMAINING LOCATION = 1,800 CU, YDS.  
TOTAL CUT = 4,545 CU. YDS.  
TOTAL FILL = 500 CU. YDS.



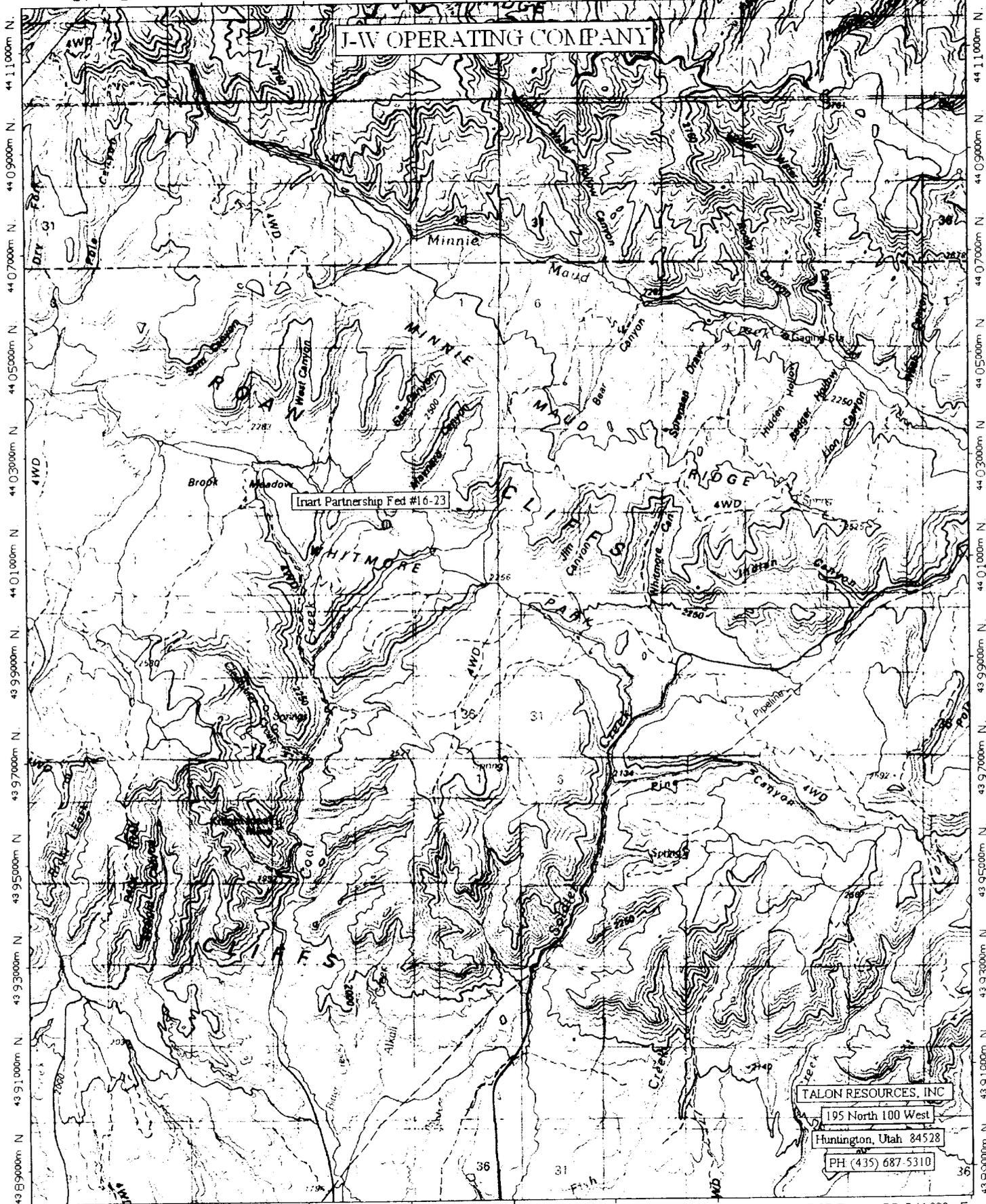
  
**TALON RESOURCES, INC.**  
 195 North 100 West P.O. Box 1230  
 Huntington, Utah 84528  
 Phone (435)687-5310 Fax (435)687-5311  
 E-Mail talon@rtv.net



**Iriart Partnership Fed #16-23**  
 Section 23, T12S, R11E, S.L.B.&M.  
 Carbon County, Utah

Drawn By: <b>J. STANSFIELD</b>	Checked By: <b>L.W.J.</b>
Drawing No. <b>L-1</b>	Date: <b>11/18/04</b> Scale: <b>1" = 2000'</b>
Sheet <b>4</b> of <b>4</b>	Job No. <b>1533</b>

524000m E. 526000m E. 528000m E. 530000m E. 532000m E. 534000m E. 536000m E. 538000m E. 540000m E.

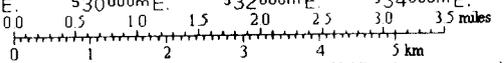


43 89000m N  
43 91000m N  
43 93000m N  
43 95000m N  
43 97000m N  
43 99000m N  
44 01000m N  
44 03000m N  
44 05000m N  
44 07000m N  
44 09000m N  
44 11000m N

43 89000m N  
43 91000m N  
43 93000m N  
43 95000m N  
43 97000m N  
43 99000m N  
44 01000m N  
44 03000m N  
44 05000m N  
44 07000m N  
44 09000m N  
44 11000m N

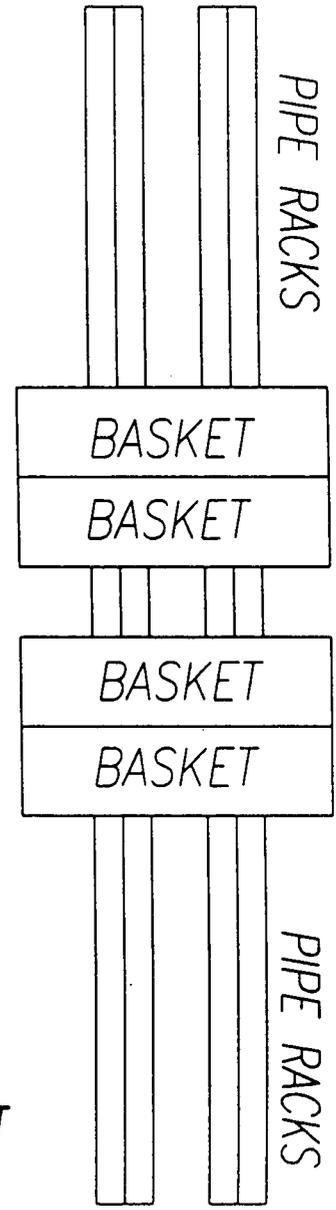
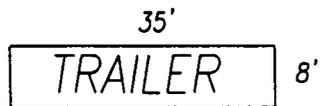
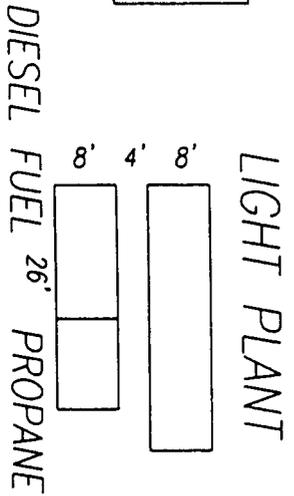
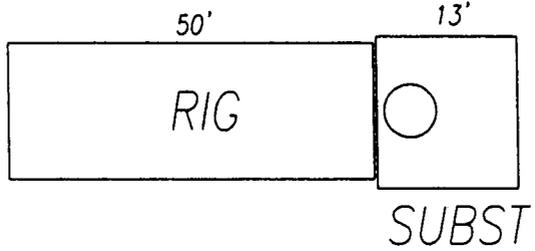
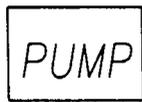
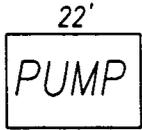
524000m E. 526000m E. 528000m E. 530000m E. 532000m E. 534000m E. 536000m E. 538000m E. 540000m E. NAD27 Zone 12S 541 000m E.

TN  
MN  
12 1/4"



Printed from TOPO! ©2000 National Geographic Holdings (www.topo.com)

TALON RESOURCES, INC  
 195 North 100 West  
 Huntington, Utah 84528  
 PH (435) 687-5310

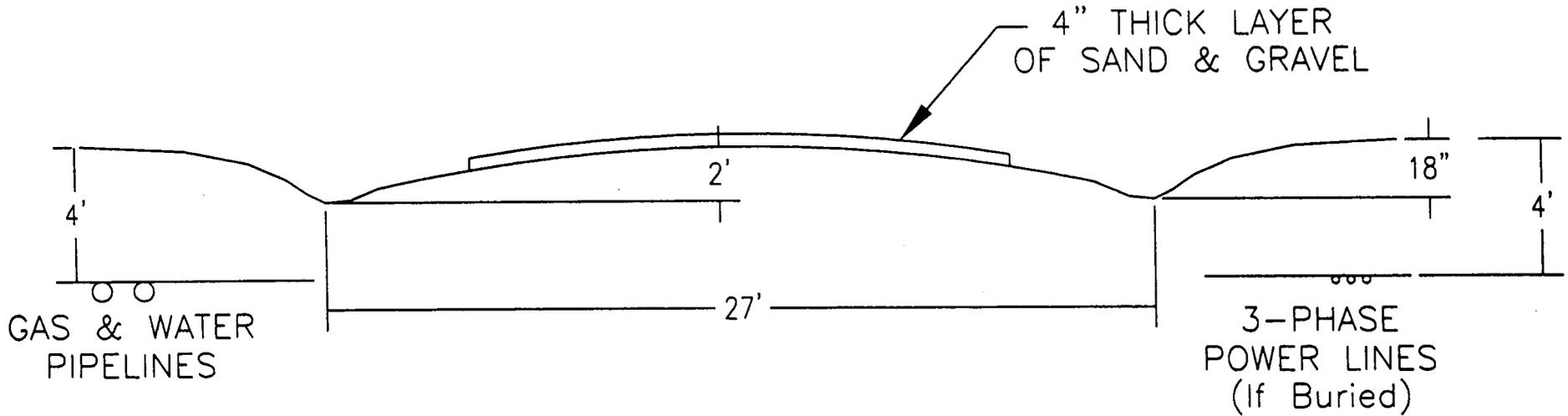


APPROXIMATE LAYOUT OF RIG & EQUIPMENT  
(Not to Scale)

EXHIBIT "C"



# TYPICAL ROAD CROSS-SECTION



# BOP Equipment

2000 psi WP

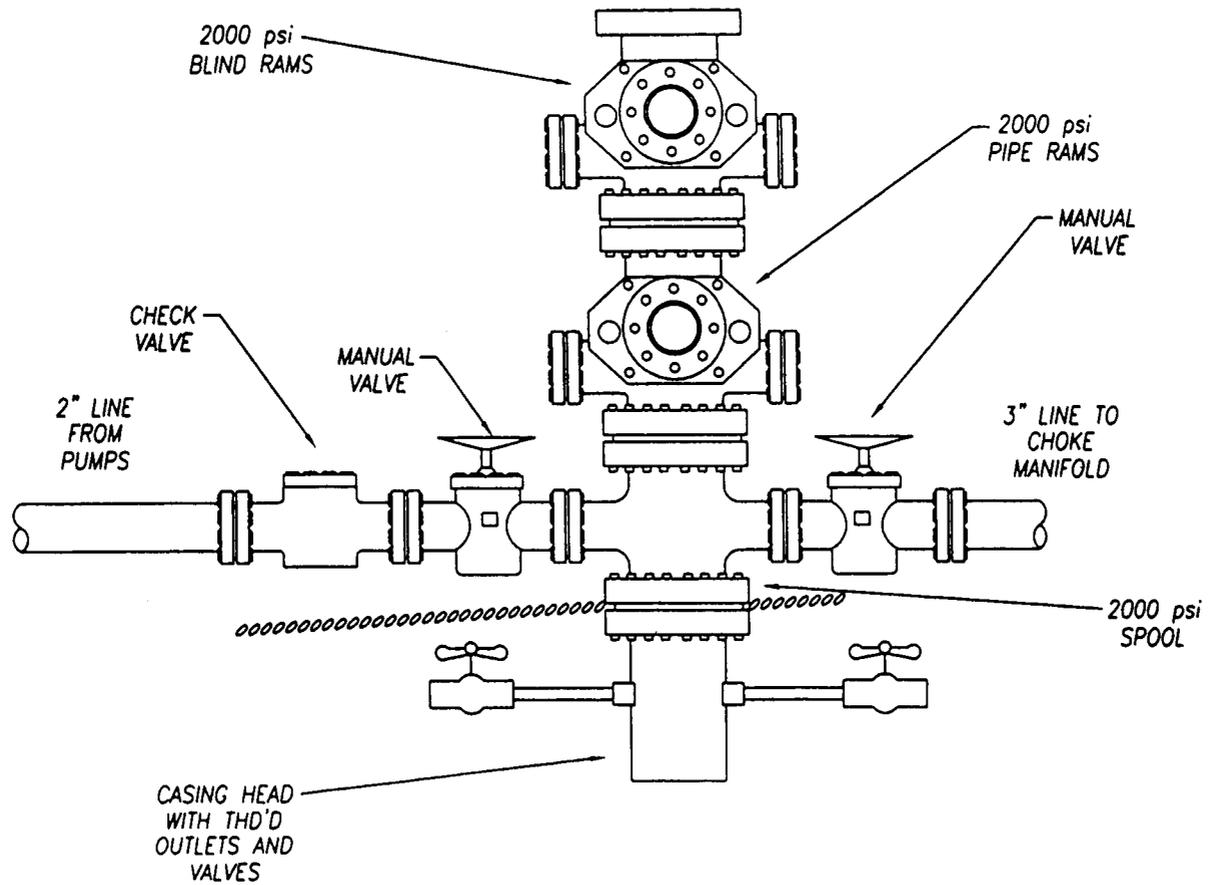
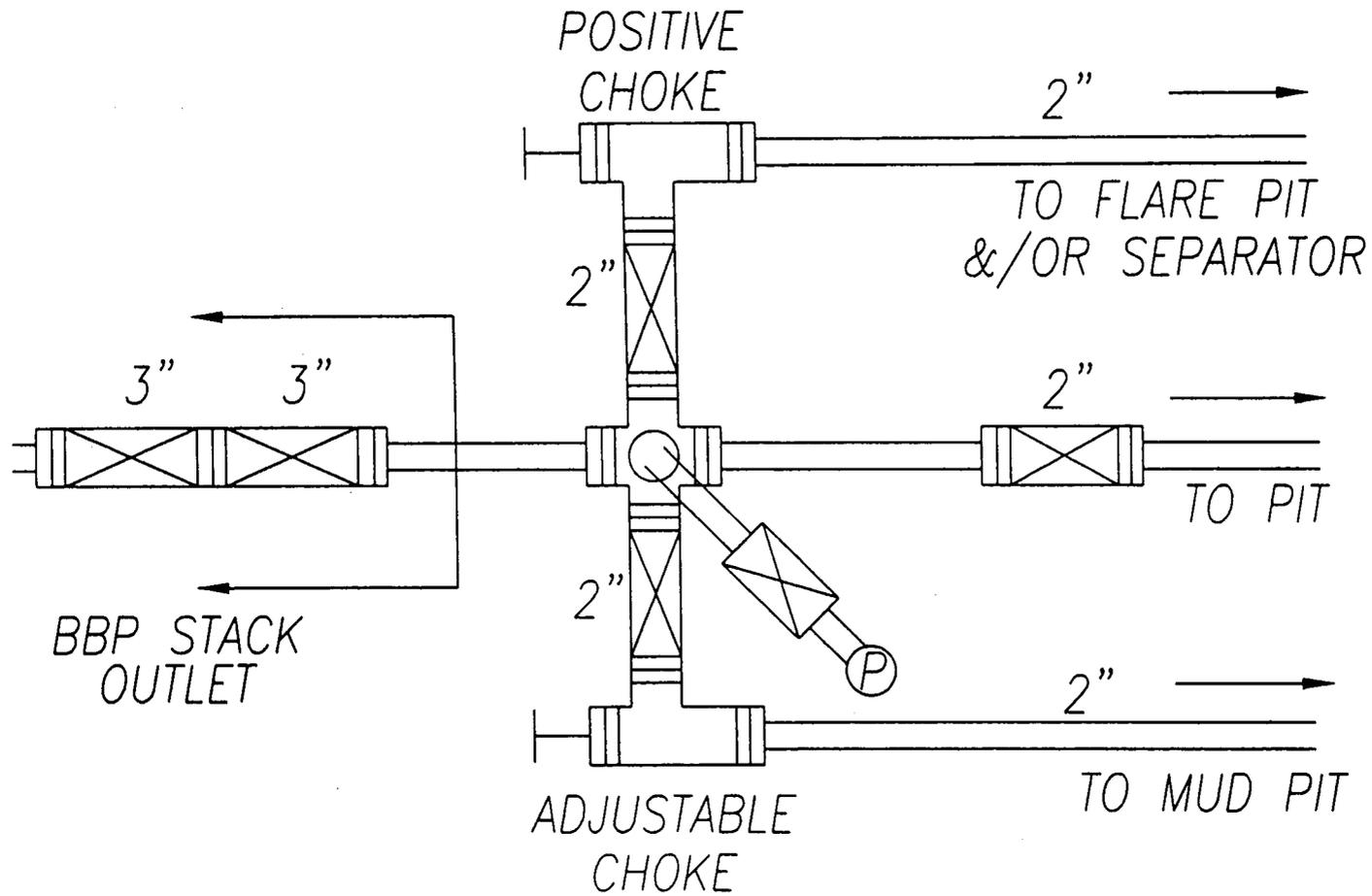


EXHIBIT "G"



# CHOKE MANIFOLD





**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 12/27/2004

API NO. ASSIGNED: 43-007-30996
--------------------------------

WELL NAME: IRIART PARTNERSHIP FED 16-23  
 OPERATOR: J-W OPERATING COMPANY ( N2145 )  
 CONTACT: LARRY JOHNSON

PHONE NUMBER: 435-687-5310

PROPOSED LOCATION:  
 NWNE 23 120S 110E  
 SURFACE: 0741 FNL 1742 FEL  
 BOTTOM: 0660 FSL 0660 FWL  
 CARBON  
 WILDCAT ( 1 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal  
 LEASE NUMBER: UTU80904  
 SURFACE OWNER: 4 - Fee  
 PROPOSED FORMATION: BLKHK  
 COALBED METHANE WELL? NO

LATITUDE: 39.76674  
 LONGITUDE: -110.6672

RECEIVED AND/OR REVIEWED:

Plat  
 Bond: Fed[1] Ind[] Sta[] Fee[]  
 (No. UTB000142 )

Potash (Y/N)  
 Oil Shale 190-5 (B) or 190-3 or 190-13  
 Water Permit  
 (No. MUNICIPAL )

RDCC Review (Y/N)  
 (Date: 08/24/2004 )

Fee Surf Agreement (Y/N)

LOCATION AND SITING:

R649-2-3.  Horizontal  
 Unit WHITMORE

R649-3-2. General  
 Siting: 460 From Qtr/Qtr & 920' Between Wells

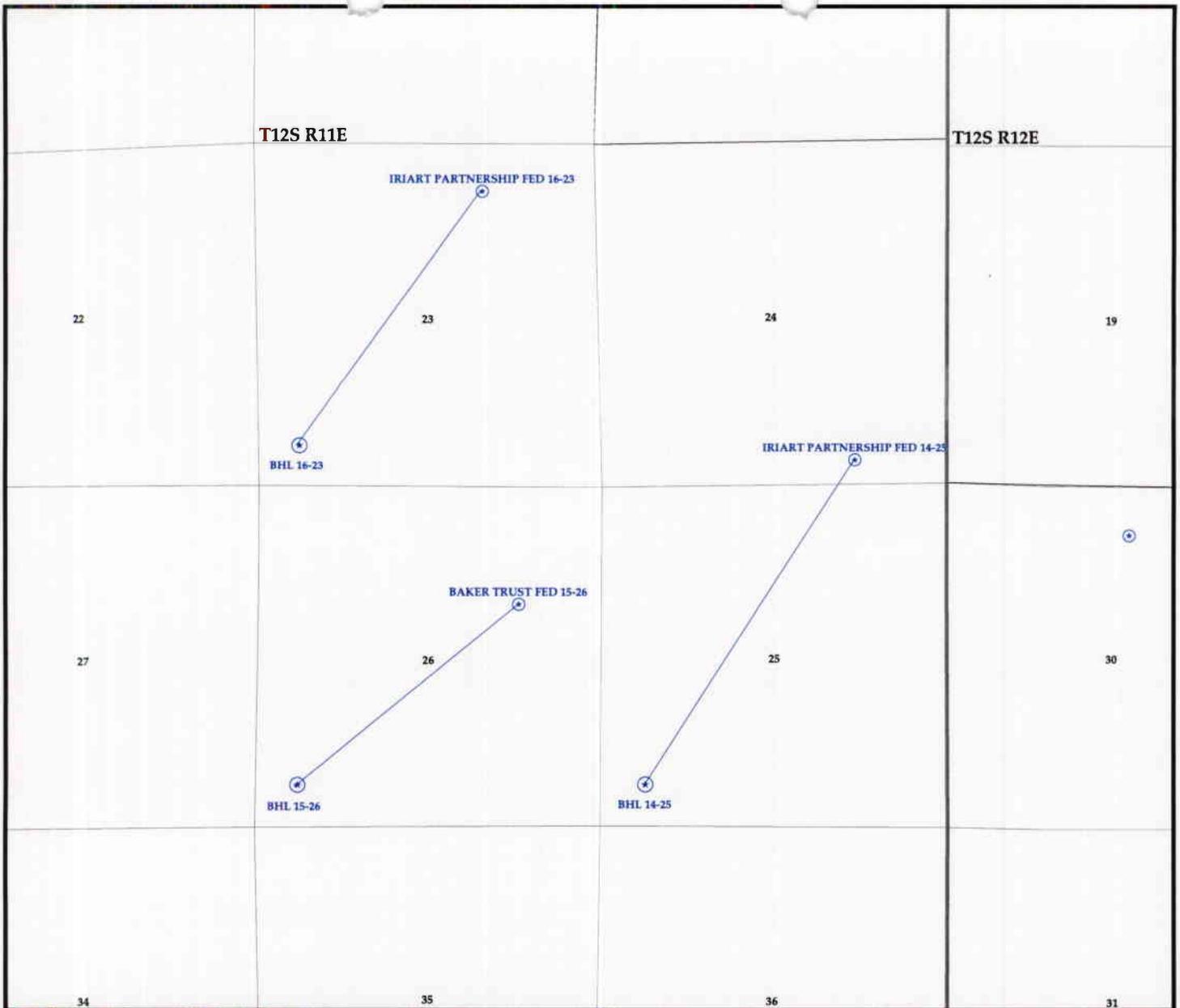
R649-3-3. Exception

Drilling Unit  
 Board Cause No: \_\_\_\_\_  
 Eff Date: \_\_\_\_\_  
 Siting: \_\_\_\_\_

R649-3-11. Directional Drill

COMMENTS: Prints (Rec'd 12-13-04)

STIPULATIONS: 1- General approval  
2- STATEMENT OF BASIS



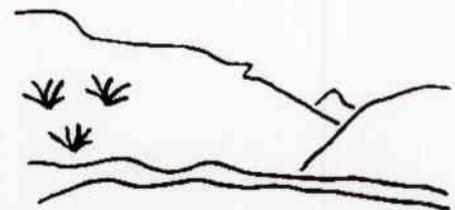
OPERATOR: J-W OPERATING CO (N1695)

SEC. 23 T.12S R.11E

FIELD: WILDCAT (001)

COUNTY: CARBON

SPACING: R649-3-2.3/HORIZONTAL DRILLING



Utah Oil Gas and Mining

**Wells**

- ∅ GAS INJECTION
- ⊠ GAS STORAGE
- × LOCATION ABANDONED
- ⊙ NEW LOCATION
- ⊕ PLUGGED & ABANDONED
- ✱ PRODUCING GAS
- PRODUCING OIL
- ⊖ SHUT-IN GAS
- ⊙ SHUT-IN OIL
- × TEMP. ABANDONED
- TEST WELL
- ▲ WATER INJECTION
- ◆ WATER SUPPLY
- ♠ WATER DISPOSAL

**Units.shp**

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

**Fields.shp**

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED



PREPARED BY: DIANA WHITNEY  
DATE: 30-DECEMBER-2004



# United States Department of the Interior

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

3160  
(UT-062)

Mr. Robert Eller  
J-W Operating Company  
P.O. Box 305  
Wray, Colorado 80758

JAN 25 2005

Re: Inconsistencies in Applications for Permit to Drill (APDs)  
Barker Trust Federal #15-26  
Critchlow Federal #17-17  
Iriart Partnership Federal #14-25  
Iriart Partnership Federal #16-23  
Iriart Partnership Federal #13-30  
Carbon County, Utah

RECEIVED  
JAN 27 2005  
DIV. OF OIL, GAS & MINING

Dear Mr. Eller:

In reviewing the above referenced APDs we have identified several inconsistencies and points in need of clarification for us to continue our review. Because these wells are proposed to be drilled horizontally and completed through more than one lease, it is imperative, with respect to correlative rights, that all involved parties have a clear understanding of what is being proposed.

Although similar inconsistencies appear in all of the referenced APDs, for the sake of brevity, the Barker Trust Federal #15-26 APD is used as an example for identifying our concerns:

1. In the 8-Point Drilling Plan portion of the APD, item #3 Projected Gas & Water zones identifies, "Upper Sunnyside Coals 3024'-3032'" as the presumed target. However, these depths do not comport with item #2 of the Drilling Plan which estimates the top of the Sunnyside to be at 3155'. To further confuse the issue, the wellbore schematic included with the APD depicts the entire horizontal leg as being drilled through the Gilson coal seam.
2. Item #3 in the Drilling Plan estimates the kick-off point to be at 3190'. However, this would place the kick-off below both depths given for the Sunnyside coal, the presumed target.
3. Item #4 Proposed Casing and Cement Program: Cement for the production casing is described as "API Class G," but the weight and yield given are not

consistent with neat Class G cement. If the difference is attributable to proposed cement additives, please identify the additive(s) and concentration(s).

4. Item #2 Estimated Tops of Important Geologic Markers, makes no reference to the Price River Formation or the North Horn Formation. These formations both have potential water bearing capacity, and could be present in the uncemented section of the wellbore. Please expand the description of geologic units between the Colton Formation and the Castlegate Sandstone. Considering the shallow setting depth of the surface casing and the relatively long section of uncemented wellbore, as proposed, we need to ensure that adequate attention has been given to potential water zones and their protection.
5. Item #6 The Type and Characteristics of the Proposed Circulating Muds. This section of the APD contains two tables that appear to be in conflict; please clarify.

Please thoroughly review the referenced APDs and correct or clarify the identified points of concern, and any other points of potential confusion that you might discover in your review. We will be able to resume processing the referenced APDs when the deficiencies are corrected.

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

Sincerely,

**/s/ Eric Jones**

Acting Assistant Field Manager  
Division of Resources

cc: UT-090, MMaddux  
State of Utah, Division of Oil, Gas and Mining  
Ginny Burchard, J-W Operating Company  
Larry Johnson, Talon Resources

letter\JW.apd inconsistencies  
EJones:mm:1/21/05

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

5. Lease Serial No. UTU-73890
6. If Indian, Allottee or Tribe Name N/A
7. If Unit or CA/Agreement, Name and/or No. Soldier Creek Unit
8. Well Name and No. Iriart Partnership Federal 16-23
9. API Well No. 43-007-30996
10. Field and Pool, or Exploratory Area Natural Buttes
11. County or Parish, State Uintah County, Utah

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator **J-W Operating Company**

3a. Address  
7074 South Revere Parkway, Centennial, CO 80112-3932

3b. Phone No. (include area code)  
720 385-3072

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**Surface Location: 741' FNL & 1,742' FEL, NW/4 NE/4, Section 23, T12S, R11E, SLB&M**

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

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

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

Attached please find an updated drilling plan for the referenced well.

**FILE COPY**

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

Name (Printed/Typed) <b>Don Hamilton</b>	Title <b>J-W Operating Company</b>	<b>RECEIVED</b> <b>DEC 14 2006</b>
Signature <b>Don Hamilton</b>	Date <b>12-11-06</b>	

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

DIV. OF OIL, GAS & MINING

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

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

(Instructions on page 2)

**DRILLING PLAN**

**APPROVAL OF OPERATIONS**



Attachment to BLM Form 3  
J-W Operating Company  
Iriart Partnership Federal #16-23  
Surface: 741' FNL, 1,742' FEL, NW/4 NE/4,  
Target: 660' FSL, 660' FWL, SW/4 SW/4,  
Section 23, T12S, R11E, SLB&M  
Carbon County, Utah

- 1. GEOLOGIC SURFACE FORMATION Tertiary Colton
- 2. ESTIMATED DEPTHS OF IMPORTANT GEOLOGIC MARKERS (TVD)

<u>Formation</u>	<u>Depth</u>
Northhorn	1,940'
Price River	2,565'
Sunnyside	3,150'
Gilson	3,380'
Kenilworth	3,430'

- 3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS (TVD)

<u>Formation</u>	<u>Depth</u>	<u>Type</u>
Castlegate	3,240'	Gas
Blackhawk	2,960'	Gas
Gilson	3,380'	Gas

Target zone is the Gilson Coal and well will be horizontally drilled and open-hole completed. The End of Build is the intersection of the Gilson Coal which is approximately 97 degrees from vertical. MWD directional tools will be used along with a mud motor to drill these wells.

Groundwater is anticipated within the Price River Formation and the North Horn Formation.

Casing & cement will be utilized to protect potentially productive hydrocarbons, lost circulation zones, abnormal pressure zones, and prospectively valuable mineral deposits.

All indications of usable water will be reported.

- 4. PROPOSED CASING PROGRAM

All casing used to drill this well will be new casing. (TVD Depths)

<u>Type</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Conn.</u>	<u>Top</u>	<u>Bottom</u>	<u>Hole</u>
Surface	10 3/4"	40.5 ppf	J-55	STC	0'	250'	13-3/4"
Production	7"	20.0 ppf	J-55	LTC	0'	3655' (End of Build)	9-7/8"
Open-hole						7982' (MD-TD)	6-1/4"

- 5. OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

Surface hole: No BOPE will be utilized.

Production hole: Prior to drilling out the surface casing shoe, 2,000 psi or greater BOP equipment will be installed. The pipe rams will be operated at least once per day from surface casing to total depth. The blind rams will be tested once per trip from surface casing to total depth if operations permit.

A diagram of the planned BOP equipment for normal drilling operations in this area is attached ( Exhibit "G" ). As

## DRILLING PLAN

### APPROVAL OF OPERATIONS

denoted there will be two valves and one check valve on the kill line, two valves on the choke line, and two adjustable chokes on the manifold system. The BOP "stack" will consist of two BOP rams (1 pipe, 1 blind) and one annular type preventer, all rated to a minimum of 2,000 psi working pressure.

The BOP equipment will be pressure tested prior to drilling below the surface casing shoe. All test pressures will be maintained for fifteen (15) minutes without any significant pressure decrease. Clear water will be circulated into the BOP stack and lines prior to pressure testing. The following test pressures will be used as a minimum for various equipment items.

1.	Annular BOP	1,500 psi
2.	Ram type BOP	2,000 psi
3.	Kill line valves	2,000 psi
4.	Choke line valves and choke manifold valves	2,000 psi
5.	Chokes	2,000 psi
6.	Casing, casinghead & weld	1,500 psi
7.	Upper kelly cock and safety valve	2,000 psi
8.	Dart valve	2,000 psi

The following shall be entered in the driller's log:

- 1) Blowout preventer pressure tests, including test pressures and results;
- 2) Blowout preventer tests for proper functioning;
- 3) Blowout prevention drills conducted;
- 4) Casing run, including size, grade, weight, and depth set;
- 5) How the pipe was cemented, including amount of cement, type, whether cement circulated, location of the cementing tools, etc.;
- 6) Waiting on cement time for each casing string;
- 7) Casing pressure tests after cementing, including test pressures and results.

#### 6. MUD SYSTEMS

- An air or an air/mist system may be used to drill to drill the surface hole until water influx becomes too great.
- H2O mud system will be used to drill well
- Air or Air/ Mist system will be used to drill lateral.

<u>Depths</u>	<u>Mud Weight (ppg)</u>	<u>Mud System</u>
0' - 250'	8.4	Fresh H2O/ Light Base Mud
250' - 3655'	8.6	Fresh H2O/ Light Base Mud
3655' - TD	< 8.33	Air / Air Mist

#### 7. AUXILIARY EQUIPMENT TO BE USED

- a. Kelly cock.
- b. Full opening valve with drill pipe connection will be kept on floor. Valve will be used when the kelly is not in string.

#### 8. TESTING, LOGGING, AND CORING PROGRAMS TO BE FOLLOWED.

<u>Depths</u>	<u>Log</u>	<u>Type</u>
0' - 250'	None	None
250' - 3655'	Electric Wireline	GR-SP-Array Induction-CNL-Caliper

**CONFIDENTIAL**

**DRILLING PLAN**

**APPROVAL OF OPERATIONS**

9. **ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES EXPECTED**

- Expected BHP 1,500–2,000 psi (lower than normal pressure gradient).
- No abnormal temperature or pressures are anticipated.
- The formations to be penetrated do not contain known H2S gas.

10. **CEMENT SYSTEMS**

a. Surface Cement:

Drill 13 3/4" hole to 250' and cement 10-3/4" to surface with 150 sks Class "C" cement with 2% CaCl<sub>2</sub> and 1/4 #/sk. Celo-Flake. Casing will be topped out w/ Class 'C' Cement .

b. Production Casing Cement:

- Drill 9-7/8" hole to 3655'±, run and cement 7".
- Will cement w/ 408 sks Class 'G' Cement w/ 2% Salt. Production cement was designed to contain 4% Bentonite or gel.
- Will Attempt to cement Production Casing to +/- 200' above Northhorn or approximate 1700' MD.
- Pump 20 bbl Mud Clean II unweighted spacer, followed by 20 Bbls fresh H2O spacer.
- Displace with H2O or Mud.

Type	Sacks	Interval	Density	Yield	Hole Volume	Cement Volume	Excess
Surface	150	0' - 250'	14.8 ppg	1.32	86 CF	172 CF	100%
Production	408	1700' - 3655'	14.2 ppg	1.52	517 CF	621 CF	20%

Note: Caliper will be run to determine exact cement volume.

11. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS**

Starting Date: June 1, 2005  
Duration: 30 Days

12. **NOTIFICATION OF OPERATIONS**

Verbal and/or written notifications listed below shall be submitted in accordance with instructions from the Division of Oil, Gas & Mining:

- (a) prior to beginning construction;
- (b) prior to spudding;
- (c) prior to running any casing or BOP tests;
- (d) prior to plugging the well, for verbal plugging instructions.

Spills, blowouts, fires, leaks, accidents or other unusual occurrences shall be reported to the Division of Oil, Gas & Mining immediately.



**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

March 5, 2007

J-W Operating Company  
P O Box 305  
Wray, CO 80758

Re: Iriart Partnership Federal 16-23 Well, Surface Location 741' FNL, 1742' FEL,  
NW NE, Sec. 23, T. 12 South, R. 11 East, Bottom Location 660' FSL,  
660' FWL, SW SW, Sec. 23, T. 12 South, R. 11 East, Carbon 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 43-007-30996.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

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

**Operator:** J-W Operating Company  
**Well Name & Number** Iriart Partnership Federal 16-23  
**API Number:** 43-007-30996  
**Lease:** UTU-80904

**Surface Location:** NW NE      **Sec.** 23      **T.** 12 South      **R.** 11 East  
**Bottom Location:** SW SW      **Sec.** 23      **T.** 12 South      **R.** 11 East

### 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 with 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281

3. Reporting Requirements

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

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

6. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

7. Operator shall comply with applicable recommendations resulting from Resource Development Coordinating Committee review. Statements attached.

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

March 12, 2007

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2007 Plan of Development Whitmore Unit, Carbon County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following horizontal well is planned for calendar year 2007 within the Whitmore Unit, Carbon County, Utah.

API#	WELL NAME	LOCATION
(Proposed PZ Blackhawk)		
43-007-30996	Iriart Partnership	Fed 16-23 Sec 23 T12S R11E 0741 FNL 1742 FEL BHL Sec 23 T12S R11E 0660 FSL 0660 FWL

Please be advised that this is the initial obligation well for the Whitmore Unit. This office has no objection to permitting the well at this time.

/s/ Michael L. Coulthard

bcc: File – Whitmore Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:3-12-07

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

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. Surface UTU80904 BHL UTU73890
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
2. NAME OF OPERATOR <b>J-W Operating Company</b>		7. UNIT AGREEMENT NAME N/A
3. ADDRESS AND TELEPHONE NO. <b>P.O. Box 305 Wray, CO 80758 970-332-3151</b>		8. FARM OR LEASE NAME, WELL NO. <b>Iriart Partnership Fed 16-23</b>
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. *) At surface <b>741 752' FNL, 1-637' FFL, 1742 NW/4 NE/4, Section 23</b> At proposed prod. zone <b>660' FSL, 660' FWL SW/4 SW/4, Section 23</b>		9. API WELL NO. <b>4300730996</b>
14. DISTANCE IN MILES AND DIRECTION <b>16 miles Northeast of Wellington, Utah</b>		10. FIELD AND POOL, OR WILDCAT <b>Undesignated</b>
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) <b>360'</b>	16. NO. OF ACRES IN LEASE <b>1360</b>	11. SEC., T., R., M., OR BLK. <b>Section 23 T12S R11E</b>
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. <b>None</b>	19. PROPOSED DEPTH <b>MD: 7962' TVD: 3277'</b>	12. COUNTY OR PARISH <b>Carbon</b>
21. ELEVATIONS (Show whether DF, RT, GR, etc.) <b>7387' GR</b>		13. STATE <b>Utah</b>
		17. NO. OF ACRES ASSIGNED TO THIS WELL <b>160 acres</b>
		20. ROTARY OR CABLE TOOLS <b>Rotary</b>
		22. APPROX. DATE WORK WILL START* <b>Sept. 1, 2004</b>

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" J-55 ST&C	36	340'	90 sacks Neat at 1.18 cubic ft/sack, 15.2 lbs./gal.
8-3/4"	7" J-55 LT&C	20	3630'	213 sacks API Class G at 1.34 cubic ft/sack, 14.8 lbs./gal
6-1/8"	4-1/2" J-55 /LS	10.5	4884'	Production Liner

Surface Owner: **Iriart Family Partnership, LTD 503 E. 100 N., Price Utah 84501**  
 Surface Representative: **Bernie Iriart, 435-637-6610**

Federal Bond Number: ~~Pending~~ **UTB0000142**  
 Fee Bond Number: **RLB 0004156**

**RECEIVED  
MAR 12 2007**

**RECEIVED  
MOAB FIELD OFFICE  
2004 JUL 30 P 12:40  
DEPT OF THE INTERIOR  
BUREAU OF LAND MGMT**

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

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data present productive zone and proposed deepening 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 *Larry W. Johnson* TITLE **Agent for J-W Operating** DATE **July 30, 2004**

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 */s/ A. Lynn Jackson* TITLE **Assistant Field Manager, Division of Resources** DATE **3/5/07**

**\*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 or the

**CONDITIONS OF APPROVAL ATTACHED**

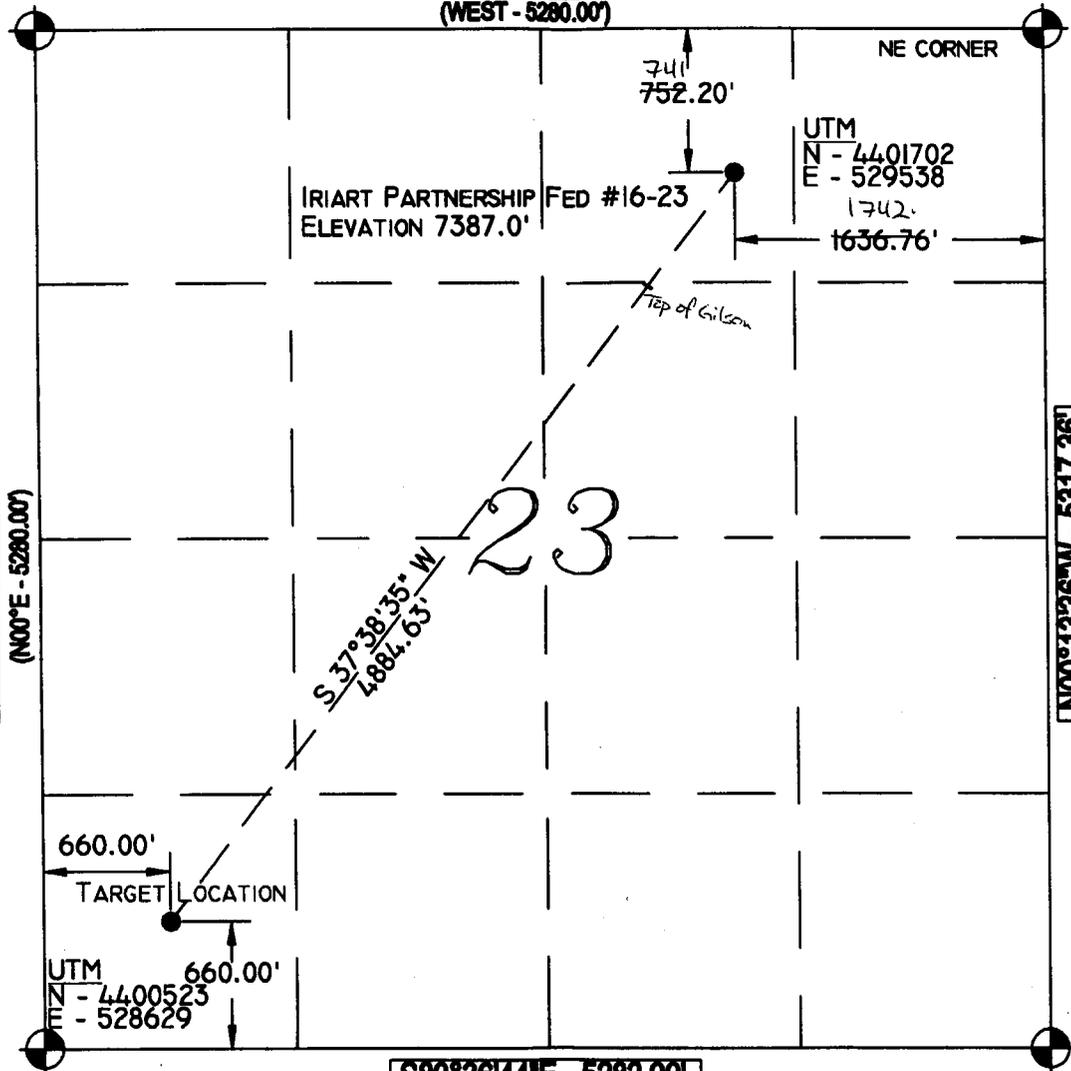
# Range 11 East

**N89°56'34"E - 5276.47'**  
(WEST - 5280.00')

Township 12 South

**N00°09'34"W - 5286.87'**  
(N00°E - 5280.00')

**N00°13'36"W - 5317.36'**  
(N00°E - 5280.00')



IRIART PARTNERSHIP  
ELEVATION 7387.0'

FED #16-23

23

S 37°38'35" W  
4,884.03'

741  
752.20'

UTM  
N - 4401702  
E - 529538  
1742.

1636.76'

NE CORNER

Top of Gilson

660.00'  
TARGET LOCATION

UTM  
N - 4400523  
E - 528629  
660.00'

**S89°36'44"E - 5282.90'**  
(S89°36"W - 5293.86')

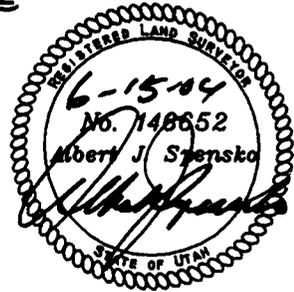
## Legend

- Drill Hole Location
- ⊙ Brass Cap (Found)
- Brass Cap (Searched for, but not found)
- △ Rock Pile
- ( ) GLO
- GPS Measured

NOTES:  
1. UTM AND LATITUDE / LONGITUDE COORDINATES  
ARE DERIVED USING A GPS PATHFINDER AND ARE  
SHOWN IN WGS 84 DATUM.

SURFACE LOCATION  
LAT / LONG  
39°45'60"N  
110°39'19"W

TARGET LOCATION  
LAT / LONG  
39°45'22"N  
110°39'57"W



GRAPHIC SCALE  
0 500' 1000'  
( IN FEET )  
1 inch = 1000 ft.

**Location:**  
THE WELL LOCATION WAS DETERMINED USING A TRIMBLE 4700  
GPS SURVEY GRADE UNIT.

**Basis of Bearing:**  
THE BASIS OF BEARING IS GPS MEASURED.

**GLO Bearing:**  
THE BEARINGS INDICATED ARE PER THE RECORDED PLAT OBTAINED  
FROM THE U.S. LAND OFFICE.

**Basis of Elevation:**  
BASIS OF ELEVATION OF 7611.00' BEING AT THE SOUTHEAST SECTION  
CORNER OF SECTION 23, TOWNSHIP 12 SOUTH, RANGE 11 EAST, SALT  
LAKE BASE AND MERIDIAN, AS SHOWN ON THE MINNIE MAUD CREEK WEST  
QUADRANGLE 7.5 MINUTE SERIES MAP.

**Description of Location:**

**SURFACE LOCATION**  
PROPOSED DRILL HOLE LOCATED IN THE NW1/4 NE1/4 OF SECTION 23,  
T12S, R11E, S.L.B.&M., BEING 752.20' SOUTH AND 1636.76' WEST  
FROM THE NORTHEAST CORNER OF SECTION 23, T12S, R11E, SALT  
LAKE BASE & MERIDIAN.

**TARGET LOCATION**  
PROPOSED TARGET LOCATED IN THE SW1/4 SW1/4 OF SECTION 23,  
T12S, R11E, S.L.B.&M., BEING 660.00' NORTH AND 660.00' EAST  
FROM THE SOUTH AND WEST LINES OF SECTION 23, T12S, R11E, SALT  
LAKE BASE & MERIDIAN.

**Surveyor's Certificate:**

I, ALBERT J. SPENSKO, A REGISTERED PROFESSIONAL LAND SURVEYOR,  
HOLDING CERTIFICATE 146652 STATE OF UTAH, DO HEREBY CERTIFY  
THAT THE INFORMATION ON THIS DRAWING IS A TRUE AND ACCURATE  
SURVEY BASED ON DATA OF RECORD AND WAS CONDUCTED UNDER MY  
PERSONAL DIRECTION AND SUPERVISION AS SHOWN HEREON.



**TALON RESOURCES, INC.**  
195 North 100 West P.O. Box 1230  
Huntington, Utah 84528  
Phone (435)687-5310 Fax (435)687-5311  
E-Mail talon@trv.net



Iriart Partnership Fed #16-23  
Section 23, T12S, R11E, S.L.B.&M.  
Carbon County, Utah

Drawn by N. BUTKOVICH	Checked by L.W.J./A.J.S.
Drawing No. A-1	Date 06/03/04
	Scale 1" = 1000'
Sheet 1 of 4	Job No. 1363

J-W Operating Company

**Iriart Partnership Federal #16-23**

Whitmore Unit (UTU-82691-X)

Lease, Surface: UTU-80904

Top of Target: UTU-80904

Bottom-hole: UTU-73890

Location, Surface: NW/NE Sec. 23, T12S, R11E

Top of Target: NW/NE Sec. 23, T12S, R11E

Bottom-hole: SW/SW Sec. 23, T12S, R11E

Carbon County, Utah

**A COMPLETE COPY OF THIS APPROVED PERMIT and Conditions of Approval shall be maintained on location during all construction and drilling operations, and shall be available to contractors to ensure compliance.**

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that J-W Operating Company is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by **UTB000142** (Principal – J-W Operating Company) via surety consent as provided for in 43 CFR 3104.2.

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

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

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. Deviation from the approved plan is not allowed. The operator is fully responsible for the actions of his subcontractors.

Failure to comply with the provisions of this permit, including applicable regulations, stipulations, and/or approval conditions, will be considered a violation subject to the enforcement provisions of 43 CFR Subpart 3163.

## A. DRILLING PROGRAM

1. The proposed 2M BOP system is adequate for anticipated conditions. Installation, testing and operation of the system shall be in conformance with Onshore Oil and Gas Order No. 2.
2. Concurrent approval from the State of Utah, Division of Oil, Gas & Mining (DOGGM) is required before conducting any surface disturbing activities.
3. Drilling reports, which describe the activities of each day, shall be submitted to the BLM Moab Field Office on a weekly, or more frequent, basis. In addition to a daily summary of activities, drilling reports shall include the drilling fluid weight, details of casing and cement, water flows, lost circulation zones and any other information that would contribute to the understanding of drilling conditions.
4. Surface casing shall be set into bedrock.
5. Any water flows encountered below the surface casing shoe shall be isolated with cement when the production (7-inch) casing is cemented into place.
6. A cement bond log (CBL) or other appropriate tool for determining top-of-cement shall be run on the production (7-inch) casing string.
7. The requirements for air drilling, found in Onshore Oil and Gas Order No. 2, part III, E (Special Drilling Operations), shall be followed.
8. A directional survey shall be submitted within 30-days of reaching total depth of the well.

SURFACE USE

1. Within six months of installation, surface structures shall be painted in the following flat, earth tone color: Olive Black (5W A 20-6). This Fuller O'Brien color is for reference only. Any brand of paint may be used provided the colors match. Any facilities that must be painted to comply with OSHA standards are exempt.
2. Dust shall be controlled during all phases of project implementation through the use of water or approved dust suppressants.
3. The Companies will provide georeferenced spatial data depicting as-built locations of all facilities, wells, roads, pipelines, power lines, and other related facilities to the BLM by November 1 of each year until completion of project construction activities has occurred.
4. Reserve pits will be adequately fenced during and after drilling operations until pit is reclaimed so as to effectively keep out wildlife and livestock. Adequate fencing, in lieu of more stringent requirements by the surface owner, is defined as follows:
5. Construction materials will consist of steel or wood posts. Three or four strand wire (smooth or barbed) fence or hog panel (16-foot length by 50-inch height) or plastic snow fence must be used with connectors such as fence staples, quick-connect clips, hog rings, hose clamps, twisted wire, etc. Electric fences will not be allowed.
6. Construction standards: Posts shall be firmly set in ground. If wire is used, it must be taut and evenly spaced, from ground level to top wire, to effectively keep out animals. Hog panels must be tied securely into posts and one another using fence staples, clamps, etc. Plastic snow fencing must be taut and sturdy. Fence must be at least 2-feet from edge of pit. 3 sides fenced before beginning drilling, the fourth side fenced immediately upon completion of drilling and prior to rig release. Fence must be left up and maintained in adequate condition until pit is closed.
7. The reserve pit will be oriented to prevent collection of surface runoff. After the drilling rig is removed, the operator may need to construct a trench on the uphill side of the reserve pit to divert surface drainage around it. If constructed, the trench will be left intact until the pit is closed.
8. The reserve pit will be lined with an impermeable liner if permeable subsurface material is encountered. An impermeable liner is any liner having a permeability less than  $10^{-7}$  cm/sec. The liner will be installed so that it will not leak and will be chemically compatible with all substances that may be put in the pit. Liners made of any man-made synthetic material will be of sufficient strength and thickness to withstand normal installation and pit use. In gravelly or rocky soils, a suitable bedding material such as sand will be used prior to installing the liner.

9. The reserve pit will be constructed so that at least half of its total volume is in solid cut material (below natural ground level).
10. The reserve pit shall have 2 foot of freeboard maintained at all times to prevent overflow of fluid.
11. In order to minimize impacts to sage grouse and leks within the project area, disturbance will be avoided within 2 miles of all know active leks during the breeding season. Seasonal stipulations will require all construction activities to cease from April 1 until June 15. In addition, no disturbance will take place before 10 am during lek season April 1 through June.15.
12. If any active raptor nests were determined to be active or any new nests would be observed within ½ mile of proposed activities, construction and drilling activities shall be curtained during the nesting period of the respective species.
13. Seven of the resources recommended as eligible to the National Register of Historic Places occurs along the south side of Whitmore Park Road and shall be avoided by any construction of pipelines along Whitmore road. Therefore, any pipeline construction or improvements of Whitmore Road shall be conducted along the north side of the road. Any improvements along the existing road in the vicinity of the eligible sites shall be monitored by a qualified archaeologist.
14. If JW Operating proceeds with plans to construct the gas and water pipelines parallel to the existing Pioneer Pipeline, the portions of the pipeline that are more than 150 feet from Whitmore Park Road shall need to be inventoried. Based on the cultural findings along Whitmore Road, it would be reasonable to expect some more resources along the pipeline corridor. If any of the findings shall be determined to be eligible for the National Register of Historic Places, slight deviations of the pipeline route may be necessary under the auspices of a qualified archaeologist.
15. A sundry notice shall be submitted to BLM prior to the discharge of produced water to the surface.
16. If any cultural values [sites, artifacts, human remains] are observed during operation of this lease/permit/right-of-way, they will be left intact and the Price Field Manager notified. The authorized officer will conduct an evaluation of the cultural values to establish appropriate mitigation, salvage or treatment. The operator 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, the operator is to immediately stop work that might further disturb such materials, and contact the authorized BLM officer (AO).

## **2.2.6 Applicant-committed Environmental Protection Measures**

The following list summarizes Applicant-committed Environmental Protection Measures that would be implemented by JW to avoid or minimize negative effects on resources.

### **Cultural Resources**

JW would instruct all employees or contractor supervisors that collection or intentional destruction of archaeological resources on the project area is illegal. Employees and contractor supervisors would also be instructed that vehicles and construction equipment must always remain on existing roads or along corridors/locations approved for surface disturbance. Such instruction would help prevent unintentional damage to cultural resources.

### **Visual Resources**

All aboveground permanent facilities on well pads would be painted with the same BLM-approved color that is consistent with the background.

### **Soils**

Construction would not occur during periods of saturated soil conditions when surface ruts greater than 4 inches would occur along straight travel routes.

### **Water Resources**

Development that would occur at Pads 13-30 and 16-23 within 100 feet of "live water" would be constructed with the following special mitigation measures:

- the edge of the pad nearest the water would be rounded off;
- a trench would be built at the edge of the pad closest to the water;
- a berm would be built between the trench and the stream; and
- a silt fence trap would be constructed.

### **Public Health and Safety**

To minimize the possibility of fires during construction and operation, all equipment, including welding trucks, would be equipped with fire extinguishers.

### **Air Quality**

If production is established, catalytic converters will be used on all pump engines to reduce emissions.

### **Vegetation (including Invasive, Non-native Weeds)**

In order to prevent the introduction and spread of invasive weed species into the project area, the following measures would be implemented:

- Any construction or operational vehicles traveling between the project location and outside areas would be power-washed on a weekly basis.
- Over the construction season, JW would implement reclamation and weed control program beginning the first growing season after each segment of project completion.

JW would reseed all portions of well pads and the ROW not utilized for the operational phase of the project. Reseeding would be accomplished using plant species determined by the landowner. Weed control would be conducted through a Pesticide Use and Weed Control Plan approved by Carbon County.

**Fish & Wildlife (including Special Status Species)**

Prior to any construction or drilling between April 1 and June 15, the known sage-grouse leks would be surveyed for the presence of sage-grouse. If the sage-grouse leks would be active, surface disturbance would not occur within a two-mile radii buffer during the breeding/nesting season (April 1 to June 15).

JW would brief their employees and contractors on the need to control garbage or other edible waste that could increase the presence of greater sage-grouse predators including ravens and foxes.

**Domestic Grazing**

JW would install cattleguards at locations where fences would need to be cut to construct access roads to the well pads, or at locations along the pipeline. Additionally, any fences that would be damaged would be repaired.

### C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

Building Location- Notify the BLM Price Field Office at least 48-hours prior to commencing construction of location.

Spud- Notify the BLM Price Field Office 24-hours prior to spud. Submit written notification (Sundry Notice, Form 3160-5) to the BLM Moab Field Office within 24-hours after spud, regardless of whether using a dry hole digger or big rig.

Daily Drilling Reports- Daily drilling reports that describe the progress and status of the well shall be submitted to the BLM Moab Field Office on at least a weekly basis. This report may be in any format customarily used by the operator.

Oil and Gas Operations Reports (OGORs)- Production from this well shall be reported to Minerals Management Service (MMS) on a monthly basis.

Sundry Notices- Any modification to the proposed drilling program shall be submitted to the BLM Moab Field Office on a Sundry Notice (Form 3160-5). Regulations at 43 CFR 3162.3-2 describe which operations require prior approval, and which require notification.

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

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

Cultural Resources- If cultural resources are discovered during construction, immediately notify the BLM Price Field Office, and work that might disturb the cultural resources shall cease.

First Production- A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the BLM Price Field Office.

Notify the BLM Moab Field Office when the well is placed into production. Initial notification may be verbal, but must be confirmed in writing within five business days. Please include the date production started, the producing formation and production volumes.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, a *Well Completion or Recompletion Report and Log* (Form 3160-4) shall be submitted to the BLM Moab Field Office within thirty-days after completion of the well. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the BLM Moab Field Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the BLM Moab Field Office. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered to be shut-in until the gas can be captured or until approval to continue the venting/flaring pursuant to NTL-4A is granted. Compensation shall be due for gas that is vented/flared without approval.

Produced Water- An application for approval of a permanent disposal method and location will be submitted to the BLM Moab Field Office for approval pursuant to Onshore Oil and Gas Order No.7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the BLM Moab Field Office for off-lease measurement, off-lease storage and/or commingling of production prior to the sales measurement point. The term "commingling" describes both the combining of production from different geologic zones and/or combining production from different leases or agreement areas.

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

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

## TABLE 1

### NOTIFICATIONS

Notify Nathan Sill (435-636-3668) of the BLM Price Field Office; or  
Walton Willis (435-636-3662) of the BLM Price Field Office for the following:

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

1 day prior to spud; (Willis)

50 feet prior to reaching the surface casing setting depth; (Willis)

3 hours prior to testing BOP equipment. (Willis)

If the person at the above number cannot be reached, notify the BLM Moab Field Office at 435-259-2100.

Well abandonment operations require 24-hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained from:

Eric Jones, Petroleum Engineer

Office: 435-259-2117

Home: 435-259-2214



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

**Division of Oil Gas and Mining**

JOHN R. BAZA  
Division Director

January 4, 2008

Pingkan Zaremba  
J-W Operating Company  
7074 South Revere Parkway  
Centennial, CO 80112-3932

Re: APD Rescinded -Iriart Partnership Fed 16-23 Sec. 23, T. 12S R. 11E  
Carbon County, Utah API No. 43-007-30996

Dear Sir/Madam:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on March 5, 2007. On December 26, 2007, you requested that the division rescind the state approved APD. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective December 26, 2007.

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

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

Sincerely,

  
Diana Mason  
Engineering Technician

cc: Well File  
Bureau of Land Management, Moab





**United States Department of the Interior**  
BUREAU OF LAND MANAGEMENT  
Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155  
<http://www.blm.gov/ut/st/en.html>

43-007-30996  
Inart Partnership  
Fed  
16-23



12S 11E 23

IN REPLY REFER TO:  
3100  
UT-922100

**JUL 31 2012**

Memorandum

To: Green River District Manager  
From: Chief, Branch of Minerals  
Subject: Corporate Merger Recognized

Attached is a copy of the Certificate of Merger issued by the Texas Secretary of State and a decision letter recognizing the merger change from the Wyoming State Office. We have updated our records to reflect the merger.

The merger from Cohort Energy Company into J-W Operating Company is effective January 1, 2012. Cohort Energy Company is the lessee of UTU84284.

*Roger L. Bankart*

cc: ONRR  
UDOGM

**RECEIVED**

**AUG 09 2012**

DIV. OF OIL, GAS & MINING

X  (817) CORPORATE MERGER \_\_\_\_\_ (940) NAME CHANGE

\*\*\*\*\*

LAND LAW EXAMINER:  Diane McComb  Date of Memo:  March 29, 2012

Effective Date of Name Change: January 1, 2012

OLD

NEW

Cohort Energy Company  
PO Box 226406  
Dallas, TX 75222-6406

J-W Operating Company  
PO Box 226406  
Dallas, TX 75222-6406

\*\*\*\*\*

UTU84284

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## CUSTOMER INFORMATION INDEX

<u>Customer</u>	<u>Address</u>	<u>City</u>	<u>ST</u>	<u>ZIP</u>	<u>CAT</u>	<u>Interest Relationship</u>	<u>Case type</u>	<u>Serial Number</u>	<u>Case Disp</u>
COHORT ENE CO	PO BOX 226406	DALLAS	TX	752226406	C	LESSEE	312022	OKNM---111346	AUTHORIZE
COHORT ENERGY CO	15508 WRIGHT BROTHERS DR	ADDISON	TX	75001	C	LESSEE	312021	COC---063769	AUTHORIZE
COHORT ENERGY CO	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311211	COC---002419	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311211	COC---002419A	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311111	COC---012100	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311212	COC---016666	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311211	COC---027711	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311211	COC---037621	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312011	COC---041103	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311211	COC---046221	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311121	COC---049412	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311211	COC---049807	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311211	COC---049809	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312022	COC---050935	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312022	COC---051120	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312022	COC---052872	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---054760	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---063970	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---065619	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---066384	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---067816	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312022	COC---070347	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312022	COC---070348	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---070404	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---070405	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---070426	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---070443	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---070444	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---072496	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---072503	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---072505	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---072507	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	312021	COC---072598	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311111	COC---0066099	AUTHORIZE

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## CUSTOMER INFORMATION INDEX

<u>Customer</u>	<u>Address</u>	<u>City</u>	<u>ST</u>	<u>ZIP</u>	<u>CAT</u>	<u>Interest Relationship</u>	<u>Case type</u>	<u>Serial Number</u>	<u>Case Disp</u>
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311111	COC---0066104	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311111	COC---0122458	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311211	COC---0122690	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	80112	C	LESSEE	311211	COC---0124024	AUTHORIZE
COHORT ENERGY CO	PO BOX 226406	DALLAS	TX	75222	C	LESSEE	312021	COC---068374	AUTHORIZE
	PO BOX 226406	DALLAS	TX	75222	C	LESSEE	312021	COC---068376	AUTHORIZE
	PO BOX 226406	DALLAS	TX	75222	C	LESSEE	312021	COC---069117	AUTHORIZE
COHORT ENERGY CO	PO BOX 226406	DALLAS	TX	752226406	C	LESSEE	312021	LAES---051729	AUTHORIZE
	PO BOX 226406	DALLAS	TX	752226406	C	LESSEE	312021	LAES---052215	AUTHORIZE
	PO BOX 226406	DALLAS	TX	752226406	C	LESSEE	312021	LAES---052216	AUTHORIZE
COHORT ENERGY COMPANY	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	311211	WYW---038832	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	311211	WYW---052711	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---147023	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---147024	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---152717	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---155785	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---155788	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---155789	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---155793	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---155794	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---155801	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---160095	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---164750	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---172307	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---173684	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---173685	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	312021	WYW---174282	AUTHORIZE
COHORT ENERGY COMPANY	PO BOX 226406	DALLAS	TX	752226406	C	OPERATING RIGHTS	311121	UTU---084284	AUTHORIZE
J-W OPER CO	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311211	COC---002419	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311211	COC---002419A	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311111	COC---012100	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	LESSEE	311111	COC---013290	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311211	COC---013838	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---021371	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---021997	AUTHORIZE

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CUSTOMER INFORMATION INDEX

<u>Customer</u>	<u>Address</u>	<u>City</u>	<u>ST</u>	<u>ZIP</u>	<u>CAT</u>	<u>Interest Relationship</u>	<u>Case type</u>	<u>Serial Number</u>	<u>Case Disp</u>
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC----021998	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC----022763	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311212	COC----023920	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC----024371	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311211	COC----027711	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC----034130	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---035074	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311211	COC---037621	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318230	COC---047592A	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318210	COC---047592X	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---049153	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311211	COC---049807	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311211	COC---049809	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---056461	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---060903	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---061635	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---061638	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---062279	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---066104	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---069823	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---069916	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	CERTIFIED OPERATOR	312021	COC---070444	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	DESIGNATED OPERATOR	312021	COC---070759	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	318310	COC---072098	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311111	COC--0066099	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311111	COC--0122458	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311211	COC--0122690	AUTHORIZE
	7074 S REVERE PKWY	CENTENNIAL	CO	801123932	C	OPERATOR	311211	COC--0124024	AUTHORIZE
J-W OPER CO	PO BOX 226406	DALLAS	TX	75222	C	OPERATOR	311111	COC---004224	AUTHORIZE
J-W OPERATING COMPANY	PO BOX 226406	DALLAS	TX	752226406	C	OPERATOR	318310	LAES--051997	AUTHORIZE
	PO BOX 226406	DALLAS	TX	752226406	C	OPERATOR	318310	LAES--054991	AUTHORIZE
	PO BOX 226406	DALLAS	TX	752226406	C	OPERATOR	318310	LAES--056499	AUTHORIZE
	PO BOX 226406	DALLAS	TX	752226406	C	OPERATOR	318310	LAES--057375	AUTHORIZE

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



Hope Andrade  
Secretary of State

**Office of the Secretary of State**

**CERTIFICATE OF MERGER**

The undersigned, as Secretary of State of Texas, hereby certifies that a filing instrument merging

**COHORT ENERGY COMPANY**  
Domestic For-Profit Corporation  
[File Number: 63963800]

Into

**J-W OPERATING COMPANY**  
Domestic For-Profit Corporation  
[File Number: 16996700]

2012 MAR 23 AM 9:00  
RECEIVED  
DOI-BLH  
CHEYENNE, WYOMING

has been received in this office and has been found to conform to law.

Accordingly, the undersigned, as Secretary of State, and by the virtue of the authority vested in the secretary by law, hereby issues this certificate evidencing the acceptance and filing of the merger on the date shown below.

Dated: 12/21/2011

Effective: 01/01/2012



Hope Andrade  
Secretary of State

EXHIBIT "A" TO AFFIDAVIT OF JEFF BROWN

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

Phone: (512) 463-5555  
Prepared by: Jean Marchione

Fax: (512) 463-5709  
TDD: 10743

Dial: 7-1-1 for Relay Services  
Document: 401727950002



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Wyoming State Office

P.O. Box 1828

Cheyenne, Wyoming 82003-1828

In Reply Refer To:

3106.8-3  
WYW38832, et al.  
(923Jensen)  
PHONE NO.: (307) 775-6252  
FAX NO.: (307) 775-6203

### NOTICE

J-W Operating Company  
P.O. Box 226406  
Dallas, TX 75222-6406  
Attention: Candace Smith

**MAR 29 2012**

### MERGER RECOGNIZED

#### *J-W Operating Company*

We received acceptable evidence of the merger of Cohort Energy Company, into J-W Operating Company with J-W Operating Company, as the surviving entity. This merger is recognized effective January 1, 2012, the day this merger was certified by the Secretary of State's office of Texas.

We have documented the merger by copies of this notice in the oil and gas lease files identified on the enclosed exhibit. We have also updated our automated records. We compiled the exhibit from leases shown on our automated records system and any list of leases you provided. The exhibit also reflects serial numbers of agreements where you are the operator. We are notifying the Minerals Management Service and all Bureau of Land Management (BLM) offices of the merger by copies of this notice.

If you find additional leases where the merging parties maintain an interest, please contact this office. We will document the records under our jurisdiction, and if the leases are under the jurisdiction of another State Office, we will notify them.

J-W Operating Company holds BLM bonds in the Colorado, Eastern States, and Wyoming State Offices.

If you have any questions regarding the Wyoming BLM bond, please contact Debra Olsen at (307) 775-6166 or FAX (307) 775-6203. If you have any questions concerning this merger, please contact Ronnie Jensen at (307) 775-6252 or FAX (307) 775-6203.



Julie L. Weaver  
for Chief, Branch of Fluid Minerals Adjudication

1 – Attachment (5 pages)  
R Jensen: 03/27/2012

cc: All Wyoming Case Files listed on Attachment

cc (w/encl):

Electronic copies (w/encl):

BLM\_Bond\_Surety

BLM\_Fluids\_Forum

Hard Copies (w/encl):

Name Change Log

Public Room Name Change Log

(921Jensen)

(923Olsen)

ONRR-MRM Dept (Mergers Only) Sandy Temple-Mail Stop MS 61213B

ONRR-MRM Dept-(Name Changes Only) Karen Witt-Harper-Mail Stop MS 61213B

Casper, RMG Sharon Taylor

Minerals Field Offices

Hard Copies

Kristine Phillips Buffalo FO

Sarah Bohl Casper FO

Andy Ambrose, Newcastle FO

Kay Nation, Rawlins FO

Patricia Hamilton, Rock Springs FO

Dorothy Savage, Rock Springs FO

Debbie Larsen, Lander FO

Jean Cattelan, Kemmerer FO

Susan Dailey, Pinedale FO

Les Margo, Pinedale FO

Jeanne Stott, Pinedale FO

Cara Blank, Cody FO

David Seward, Cody FO

Sheila McElhinny, Worland FO

Jean Cattelan, Kemmerer FO

Jeanne Stott, Pinedale FO

Les Margo, Pinedale FO

Cara Blank, Cody FO

David Seward, Cody FO

Sheila McElhinny, Worland FO

Selection Criteria for Customer Information Index - Case Rec Only

System Id = CR

Admin State = AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, WY

Geo State =

Geost County Cd =

County Txt =

Admst Dist FO Cd =

District Txt =

FO Txt =

Casetype Begins With 31

Casetype Txt Begins With

Case Disp Txt = AUTHORIZED, PENDING

Adm Agency =

Adm Agency Txt =

Cust Nm Begins With COHORT ENE, J-W OPER

Category =

Int Rel Txt =

Mer Twp Rng =

MTRS =

Cs File Juris =

Cs File Juris Txt =

Total Rows Returned: 102