

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

AMENDED REPORT
(highlight changes)

APPLICATION FOR PERMIT TO DRILL				5. MINERAL LEASE NO: Fee	6. SURFACE: Fee
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA	
8. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input type="checkbox"/> OTHER <u>CBM</u> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>				8. UNIT or CA AGREEMENT NAME: NA	
2. NAME OF OPERATOR: Anadarko Petroleum Corporation				9. WELL NAME and NUMBER: Blackhawk A-3	
3. ADDRESS OF OPERATOR: P. O. Box 1330 CITY Houston STATE TX ZIP 77251-1330			PHONE NUMBER: (832) 636-3315	10. FIELD AND POOL, OR WILDCAT: Helper/Ferron	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 821' FEL & 1998' FNL AT PROPOSED PRODUCING ZONE: SAME				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENE 20 13S 10E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 2 MILES TO SPRINGLEN				12. COUNTY: CARBON	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 821'		16. NUMBER OF ACRES IN LEASE: 841		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 160	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) ~2200'		19. PROPOSED DEPTH: 4,345		20. BOND DESCRIPTION: 224351	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 6329'		22. APPROXIMATE DATE WORK WILL START: 04/16/2003		23. ESTIMATED DURATION: 15 Days	

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT
12 1/4"	8 5/8"	24	J55, LTC	300	170 cu ft, CI G
7 7/8"	5 1/2"	17	N80, LTC	4,345	200-250 cu ft CI G

RECEIVED

MAR 20 2003

DIV. OF OIL, GAS & MINING

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Carla Ghazizadeh TITLE Env. & Reg. Analyst

SIGNATURE *Carla Ghazizadeh* DATE 3/11/2003

(This space for State use only)

API NUMBER ASSIGNED: 43-007-30914

APPROVAL:

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

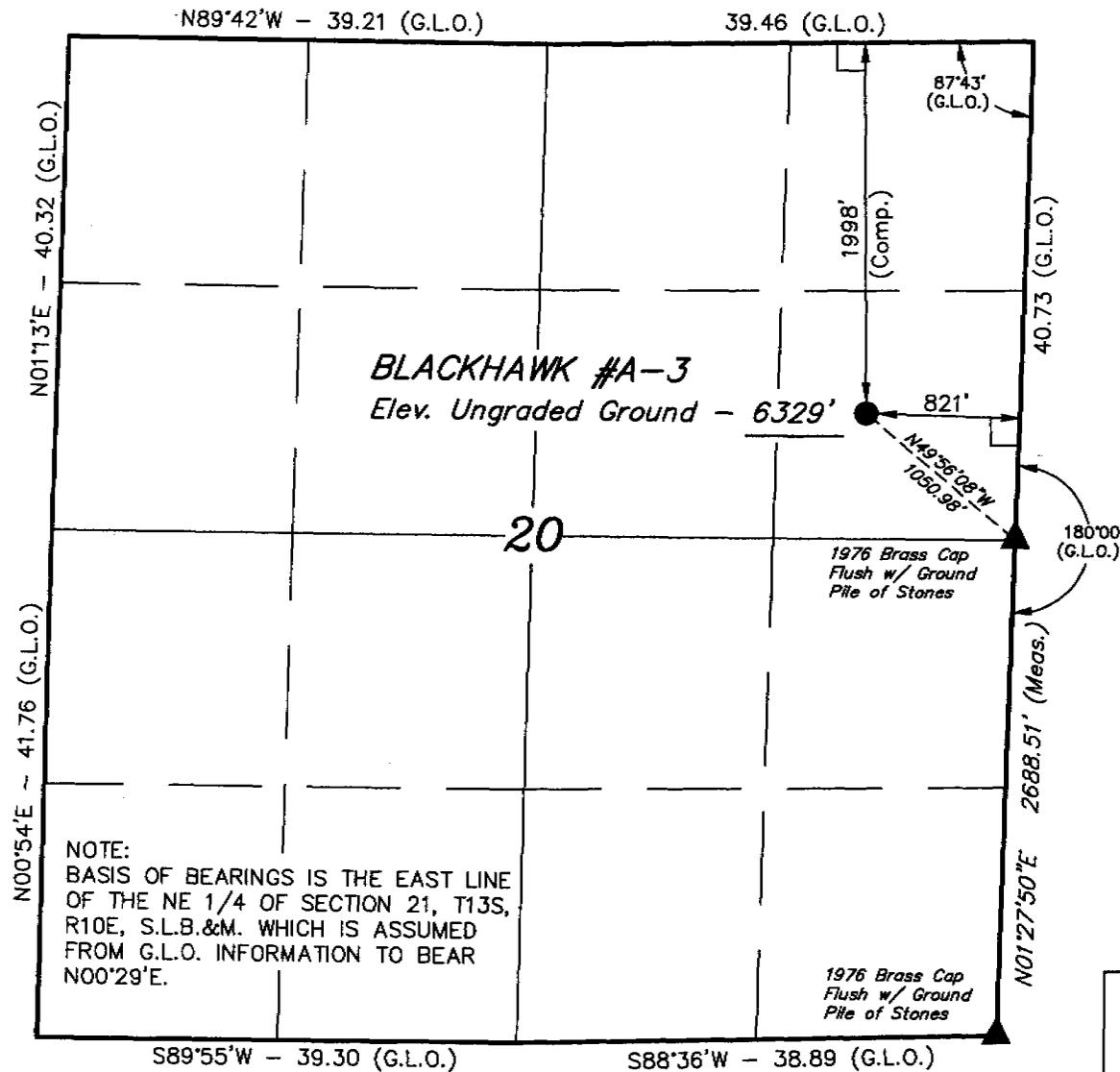
Date: 04-10-03

By: *[Signature]*

T13S, R10E, S.L.B.&M.

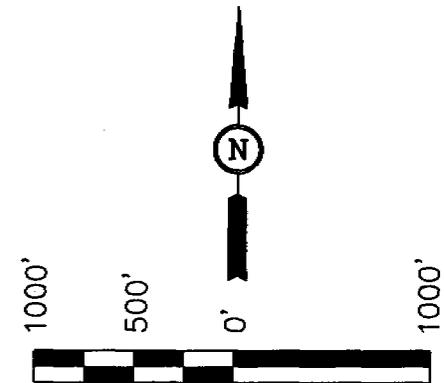
ANADARKO PETROLEUM CORP.

Well Location, BLACKHAWK #A-3, located as shown in SE 1/4 NE 1/4 of Section 20, T13S, R10E, S.L.B.&M. Carbon County, Utah.



BASIS OF ELEVATION

SPOT ELEVATION AT A ROAD INTERSECTION IN THE NE 1/4 OF SECTION 21, T13S, R10E, S.L.B.&M. TAKEN FROM THE HELPER QUADRANGLE, UTAH, CARBON COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6487 FEET.



SCALE

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Robert H. Kay
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

LEGEND:

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

(AUTONOMOUS NAD 83)
LATITUDE = 39°40'59.14" (39.683094)
LONGITUDE = 110°49'09.60" (110.819333)

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 08-29-02	DATE DRAWN: 09-04-02
PARTY G.S. K.K. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER HOT	FILE ANADARKO PETROLEUM CORP.	

**DRILLING PLAN
TO ACCOMPANY APPLICATION FOR PERMIT TO DRILL**

Company: Anadarko Petroleum Corporation Well: **BlackHawk A-3**
 Location: 1998FNL& 821FEL Lease: **0**
 T13S R10E Sec. 20
 Carbon County, Utah Surface Elevation: 6329

Surface/Mineral Ownership:

A. Estimated Tops of Important Geologic Markers:

<u>GEOLOGIC MARKER</u>	<u>DEPTH</u>
Emery	Surface
Bluegate Shale	2700
Ferron SS Member	3800
Ferron Coal Top	3815
Base of Ferron Coal	3945
Tununk Shale	4005

B. Estimated Depth at which Water, Oil, Gas or other Mineral-Bearing zones are expected to be encountered:

Gas-bearing Ferron Sandstone Member is expected to be encountered from: 3800 - 3945.

All fresh water zones and prospectively valuable mineral zones encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

C. Pressure Control Equipment:

A 9" 2000 psi WP double gate hydraulic BOP with pipe rams and blind rams will be installed on the 8-5/8" casinghead. In addition to the BOP stack, a rotating head will be installed on top of the BOP to assist in safe air drilling operations. The BOP stack will be tested prior to drilling below surface casing. The ram preventers will be tested to 70% of the working pressure of the casinghead. The annular will be tested to 50% of its working pressure. Operational checks will be made daily or on trips. A BOP schematic is shown on attached Exhibit "A".

The BOP system will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order. This inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. The accumulator system will meet IADC guidelines concerning pump capacities, storage capacity, and reservoir volume. Closing unit fluid volume will be sufficient to pre-charge the system to operating pressure plus 50% excess. One set of controls will be in the doghouse on the rig floor and one set will be remote on the drilling pad.

D. Casing Program

Surface Casing: 8-5/8", 24#, J55, LTC new casing will be set at approximately 300'.
 Production Casing: 5-1/2" 17#, N80, LTC, new casing will be set at TD if productive.

D. Casing Program (continued)

Casing Design Factors

The safety factors on casing strings will equal or exceed the following values:

Collapse	1.0
Joint Strength	1.6
Burst	1.33

E. Cement Program

Surface - Cement will be circulated to the surface. Casing will be cemented with approximately 170 cu. ft. of API Class 'G' cement.

Production - Casing will be cemented with approximately 200-250 cu. ft. of API Class 'G' thixotropic cement. The actual cement volume will be based upon hole depth and gauge, and will be determined from logs.

Additional additives will be used to retard the cement, accelerate the cement, control lost circulation, or control fluid loss. All cementing will be done in accordance with API cementing practices.

F. Mud Program and Circulating Medium:

A truck-mounted air drilling rig will be used to drill the surface hole to 300' and to pre-set the surface casing before moving a drilling rig on location to drill the rest of the hole to TD. An air or air/mist system will be used for drilling from below surface pipe at 300' to TD. The mud/fluid system will be monitored visually and with a gas chromatograph detector.

G. Coring, Logging, and Testing Program:

- a. Rotary sidewall coring in the Ferron Sandstone interval may be performed, depending upon shows and hole conditions.
- b. DST's may be run depending upon shows.
- c. The following logging program is planned:
 1. SDL-GR-CAL over prospective intervals..
 2. DIL- SP-GR-CAL over prospective intervals
- d. A mud logging unit with chromatograph will be used from approximately 1000' to TD.
- e. After production casing is installed, a cement bond log will be run to determine the top of cement. Productive zones will then be perforated and swab tested. Water produced during testing will be contained in the temporary reserve pit. All produced oil will be stored and sold. Gas will be flared during testing.

H. Abnormal Conditions and Potential Hazards:

Abnormal conditions such as abnormal temperatures or pressures are not anticipated. Potential hazards such as H₂S are also not anticipated.

I. Location and Type of Water Supply:

Water supply for drilling and completion purposes will be furnished by a water truck and will be obtained from the Price River Municipal Water District hydrant located at 1800 East 800 North, Price, Utah. This water supply is subject to change if a more economic source can be found.

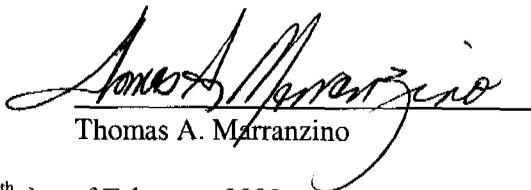
AFFIDAVIT OF SURFACE LAND USE

STATE OF TEXAS §
§
COUNTY OF MONTGOMERY §

I, Thomas A. Marranzino, being first duly sworn upon oath depose and say that:

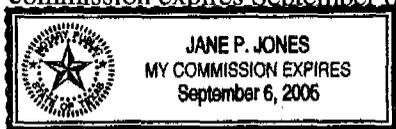
1. I am a current employee of Anadarko Petroleum Corporation and responsible for all land matters relating to certain oil and gas properties situated in Carbon County, Utah.
2. As part of these responsibilities, I have personal knowledge of that certain Right of Way and Easement Agreement, as amended, effective June 22, 2001, by and between Plateau Mining Corporation as Grantor and Anadarko Petroleum Corporation as Grantee.
3. The above described agreement sets forth the agreement of both parties whereby Anadarko has the right to use portions of the NE/4 of Section 20-13S-10E, SLB&M, Carbon County, Utah to conduct its drilling and production operations for the drilling and operation of the Blackhawk A-3 well.

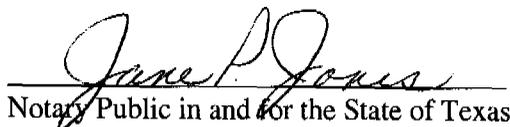
Further affiant saith not.


Thomas A. Marranzino

Subscribed and sworn to before me this 10th day of February, 2003.

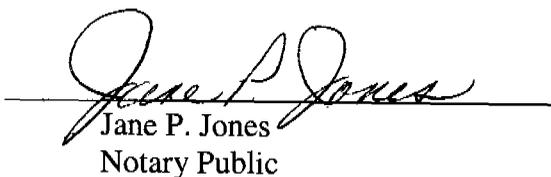
My commission expires September 6, 2005.

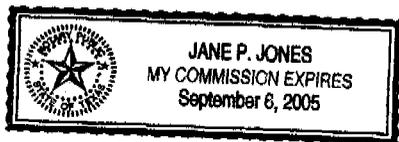



Notary Public in and for the State of Texas

STATE OF TEXAS §
§
COUNTY OF MONTGOMERY §

Before me, the undersigned authority, on this day personally appeared Thomas M. Marranzino, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same as his free act and deed for the uses and purposes therein set forth.


Jane P. Jones
Notary Public



ANADARKO PETROLEUM CORP.

BLACKHAWK #A-3

LOCATED IN CARBON COUNTY, UTAH
SECTION 20, ~~T10S~~^{T13S}, R10E, S.L.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHWESTERLY



- Since 1964 -

E&LS

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

9 | 11 | 02
MONTH | DAY | YEAR

PHOTO

TAKEN BY: G.S.

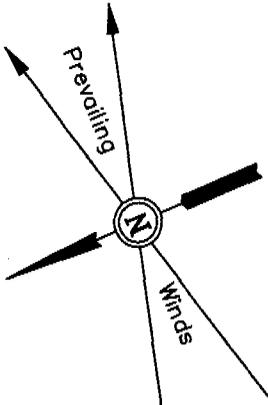
DRAWN BY: P.M.

REVISED: 00-00-00

ANADARKO PETROLEUM CORP.

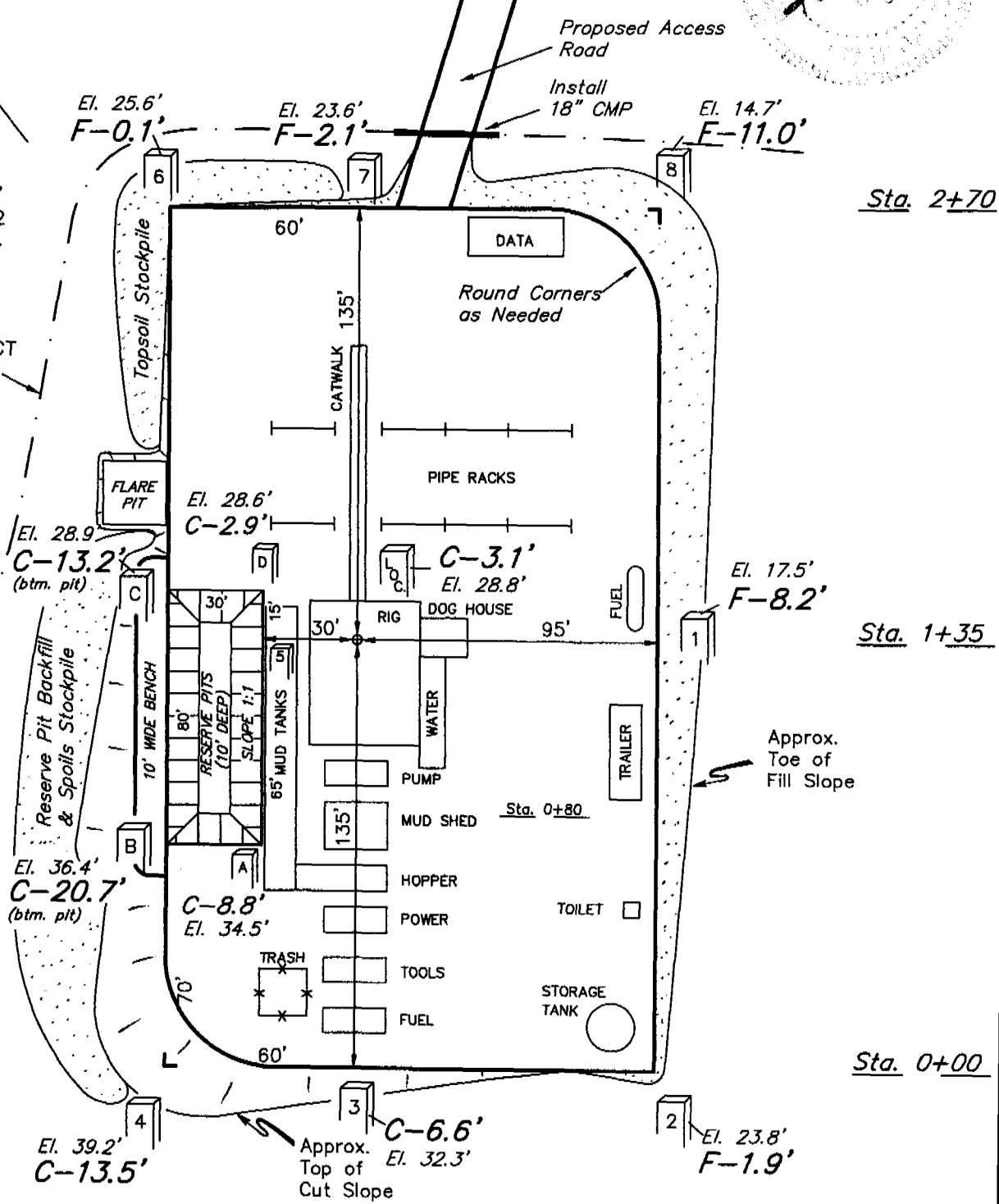
LOCATION LAYOUT FOR

BLACKHAWK #A-3
SECTION 20, T13S, R10E, S.L.B.&M.
1998' FNL 821' FEL



SCALE: 1" = 50'
DATE: 09-04-02
Drawn By: D.R.B.

CONSTRUCT
DIVERSION
DITCH



Sta. 2+70

Sta. 1+35

Sta. 0+80

Sta. 0+00

NOTE:
Pit Capacity with
2' of Freeboard
= 1,770 Bbls.

ELEV. UNGRADED GROUND AT LOC. STAKE = 6328.8'

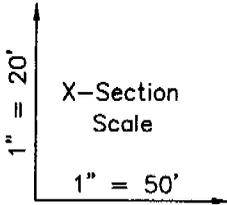
ELEV. GRADED GROUND AT LOC. STAKE = 6325.7'

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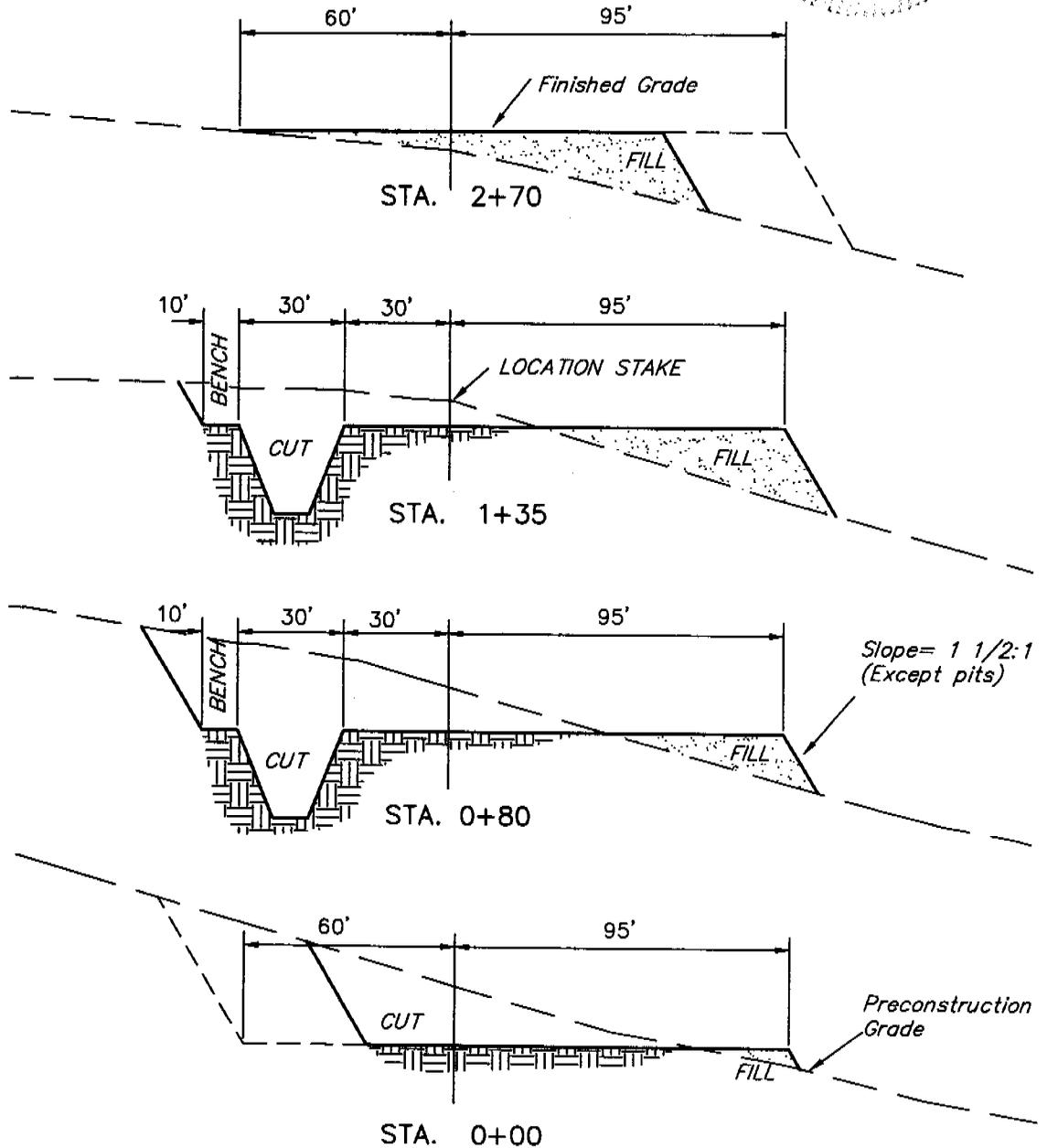
ANADARKO PETROLEUM CORP.

TYPICAL CROSS SECTIONS FOR

BLACKHAWK #A-3
SECTION 20, T13S, R10E, S.L.B.&M.
1998' FNL 821' FEL



DATE: 09-04-02
Drawn By: D.R.B.



APPROXIMATE YARDAGES

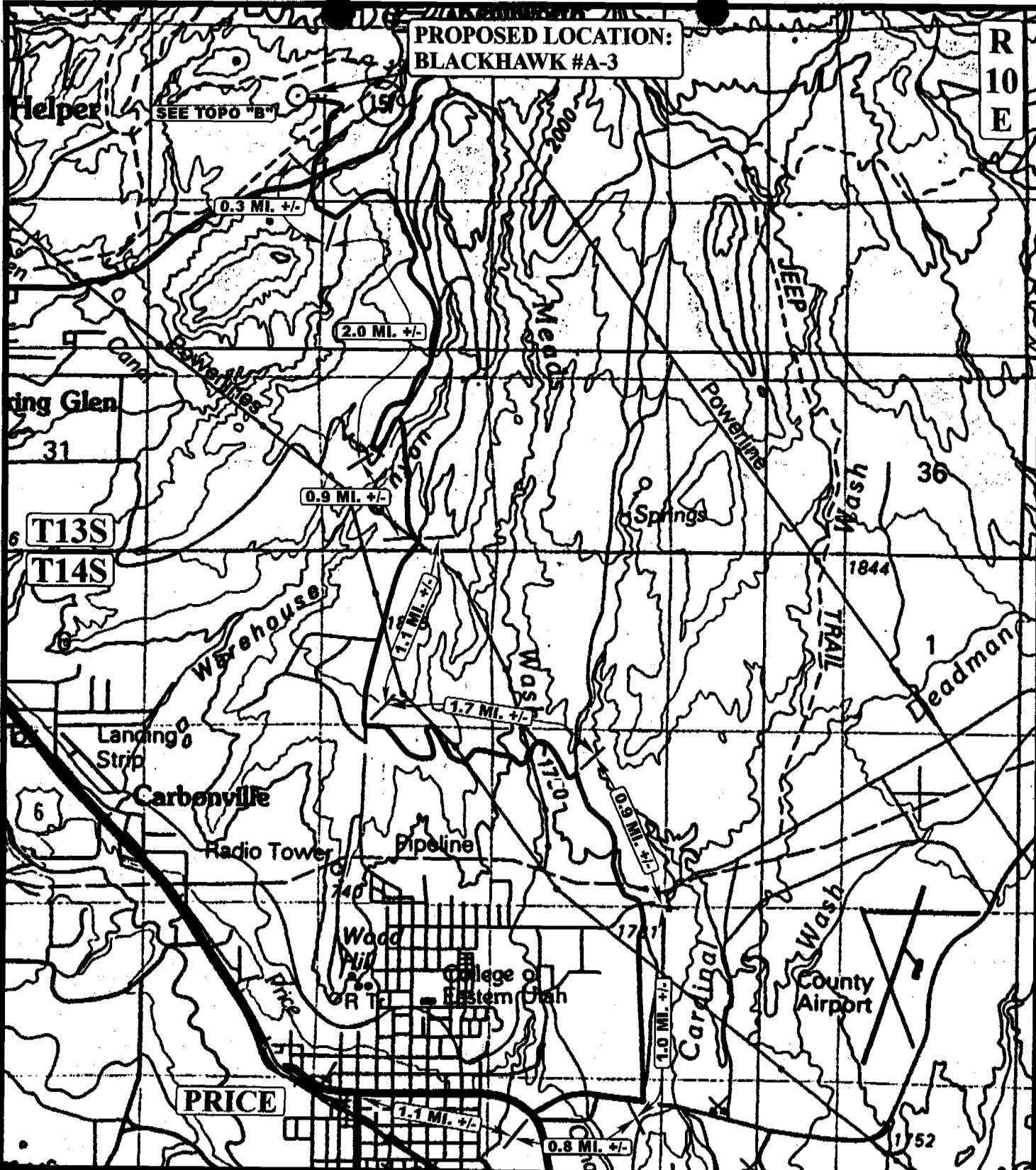
CUT	
(6") Topsoil Stripping	= 800 Cu. Yds.
Remaining Location	= 4,570 Cu. Yds.
TOTAL CUT	= 5,370 CU.YDS.
FILL	= 4,080 CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION	= 1,070 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 1,070 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 0 Cu. Yds.

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85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

PROPOSED LOCATION:
BLACKHAWK #A-3

R
10
E



LEGEND:

○ PROPOSED LOCATION



ANADARKO PETROLEUM CORP.

BLACKHAWK #A-3
SECTION 20, T13S, R10E, S.L.B.&M.
1998' FNL 821' FEL

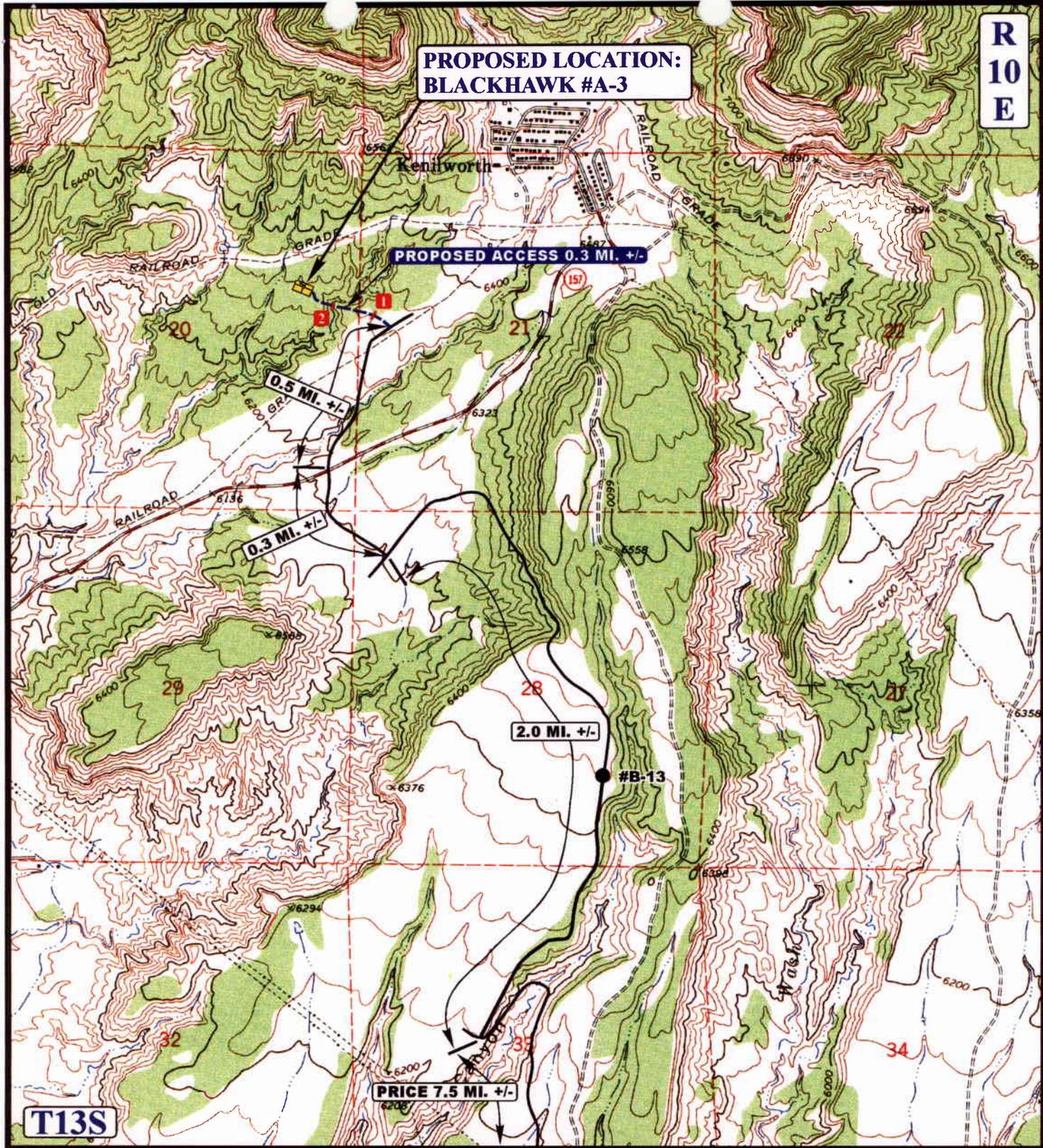
U E L S Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC	9	11	02
MAP	MONTH	DAY	YEAR
SCALE: 1" = 4000'	DRAWN BY: P.M.		REVISED: 00-00-00

TOPO

R
10
E

**PROPOSED LOCATION:
BLACKHAWK #A-3**



T13S

LEGEND:

- EXISTING ROAD
- - - PROPOSED ACCESS ROAD
- 1 18" CMP REQUIRED
- 2 54" CMP REQUIRED

ANADARKO PETROLEUM CORP.

BLACKHAWK #A-3
SECTION 20, T13S, R10E, S.L.B.&M.
1998' FNL 821' FEL



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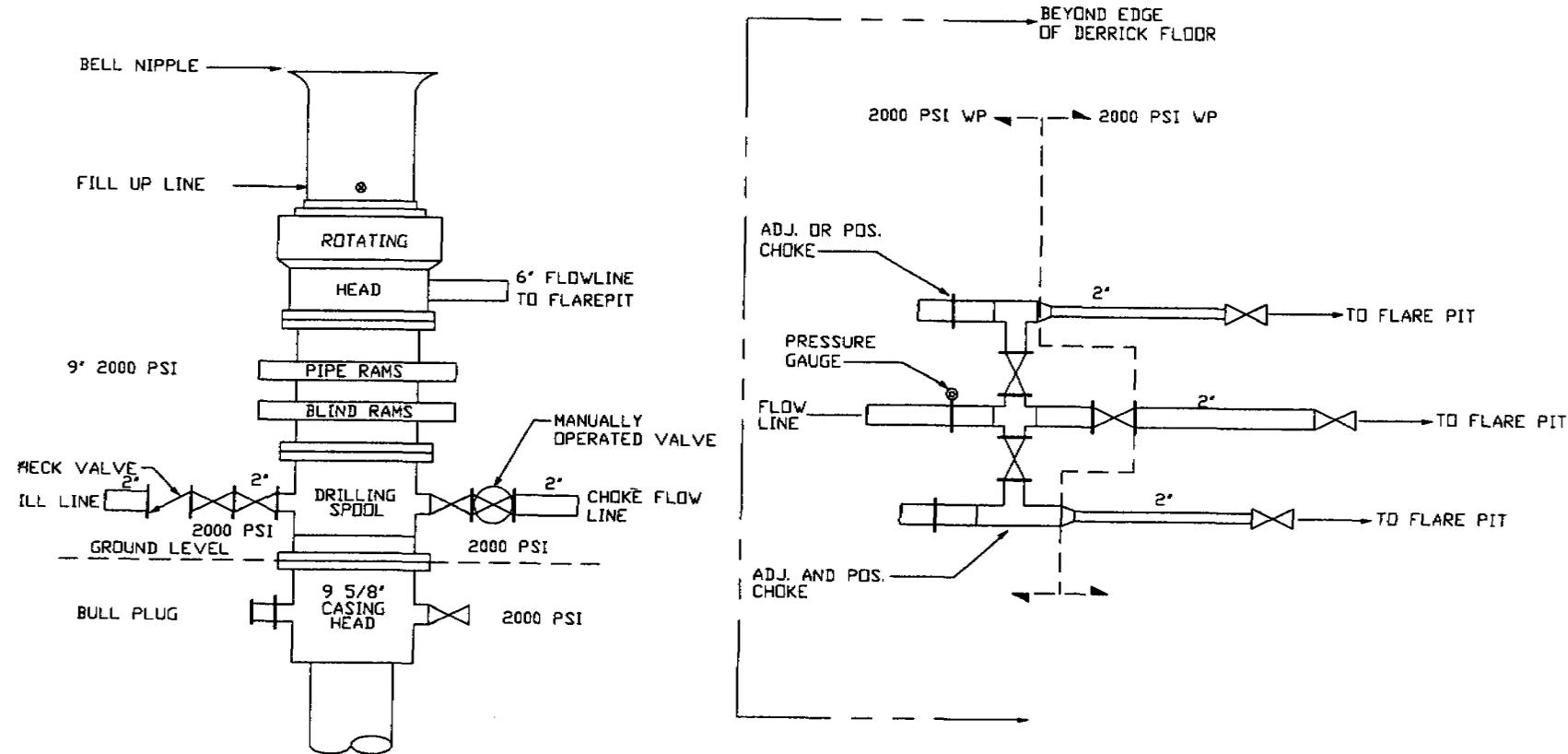
**TOPOGRAPHIC
MAP**

9	11	02
MONTH	DAY	YEAR

SCALE: 1" = 2000' DRAWN BY: P.M. REVISED: 00-00-00



2000 # WORKING PRESSURE
A.R. DRILLING



REMOVED WATER VALVE	10-10-11	JK		NOTES	NOTES	DESIGN	JAMES DORSETT	10-10-11	ANADARKO PETROLEUM CORPORATION HOUSTON TEXAS	ANADARKO PETROLEUM DRILLING PERMIT OPTION #5
ISSUE FOR CONSTRUCTION	10-10-11	JK				DRAWN	J. HALLIS	10-21-11		
DESCRIPTION	BY	DATE				SCALE	NONE	DATE		

**CULTURAL RESOURCE INVENTORY OF ANADARKO
PETROLEUM'S HELPER FIELD BLACKHAWK A-3, BLACKHAWK
A-4, AND BLACKHAWK A-4 ALTERNATE 1 WELL LOCATIONS,
CARBON COUNTY, UTAH**

by

**Keith Montgomery
Sarah Ball**

Prepared For:

**Bureau of Land Management
Price Field Office**

and

**Division of State History
Utah State Historical Preservation Office
Salt Lake City, Utah**

Prepared Under Contract With:

**Anadarko Petroleum Corporation
P.O. Box 894
Price, Utah 84501**

Prepared By:

**Montgomery Archaeological Consultants
P.O. Box 147
Moab, Utah 84532**

September 16, 2002

**United States Department of Interior (FLPMA)
Permit No. 02-UT-60122**

**State of Utah Antiquities Project (Survey)
Permit No. U-02-MQ-0590p**

ABSTRACT

A cultural resource inventory was conducted by Montgomery Archaeological Consultants (MOAC) in September 2002, for Anadarko Petroleum's Helper Field Blackhawk A-3, Blackhawk A-4, and Blackhawk A-4 Alternate 1 Well Locations, Carbon County, Utah. The archaeological survey included the three proposed well locations with associated access and pipeline corridors. A total of 42.7 acres were inventoried all of which occurs on private property.

The survey resulted in the documentation of one newly-found archaeological site (42Cb1755), two segments of a railroad (42Cb1385.4 and 42Cb1385.5), and re-visitation of a previously documented site (42Cb1382) and a segment of the same railroad (42Cb1385.3). Site 42Cb1755 consists of two possibly mining-related single-room structures, a trash concentration, and scattered trash, and appears to date between ca. 1935 and the early 1960s. It is recommended as eligible to the NRHP under Criterion (d), as there is potential for further research. Artifacts are partially buried in sand, both within, and near the structures, and in Concentration 1, and continued research could address the question of site function and age. The D&RGW Kenilworth Branch railroad grade (42Cb1385.1 and 42Cb1385.2) was originally documented by MOAC in 1999 as part of the inventory for Anadarko Petroleum's Helper Field 2000 Drilling Program (Montgomery, Ferris, and Ball 2000). The railroad was evaluated as eligible under Criterion (a) because it is considered significant for its association with events and broad patterns important to local history. Another segment of the railroad grade was documented by MOAC in 2001 (42Cb1385.3), and was re-visited during the current inventory (Montgomery and Kinnear-Ferris 2001). Two new segments of the railroad grade were recorded during the current inventory (42Cb1385.4 and 42Cb1385.5). Each of the segments are considered eligible to the NRHP under Criterion (a). Site 42Cb1382 was originally documented by MOAC in 1999 (Montgomery, Ferris, and Ball 2000). The site was revisited during the current inventory. It is a large historic garbage dump associated with the mining town of Kenilworth. The site was determined to be eligible to the NRHP under Criterion (d), since it exhibited some temporal horizontal and vertical stratification (based on surface examination and testing conducted in 1999), and could provide a unique opportunity to study the material remains from a mining town occupied by a diverse ethnic population and a particular economic group.

The undertaking will avoid site 42Cb1755 and railroad segments 42Cb1385.4 and 42Cb1385.5. Site 42Cb1382 and railroad segment 42Cb1385.3 will be crossed by the access road to the Blackhawk A-4 Alternate 1 well location. At site 42Cb1382, all concentrations will be avoided by the road. In the case of the railroad segment, the undertaking is considered to not effect the characteristics which make the historic property eligible (Criterion a). Hence, a determination of "no historic properties affected" is proposed.

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INTRODUCTION

A cultural resource inventory was conducted by Montgomery Archaeological Consultants (MOAC) in August and September 2002, for Anadarko Petroleum's Helper Field Blackhawk A-3, Blackhawk A-4, and Blackhawk A-4 Alternate 1 Well Locations, Carbon County, Utah. The archaeological survey included three proposed well locations with associated access and pipeline corridors. The inventory was implemented at the request of Mr. Jim Hartley, Anadarko Petroleum Corporation, Helper, Utah. The project area occurs on private property.

The objectives of the inventory were to locate, document, and evaluate any cultural resources within the project area in order to attain compliance with a number of federal and state mandates, including the National Historic Preservation Act of 1966 (as amended), National Environmental Policy Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, American Indian Religious Freedom Act of 1978, and the Utah State Antiquities Act of 1973 (amended 1992).

The fieldwork was performed between August 31 and September 6, 2002 under the direction of Keith Montgomery (Principal Investigator), assisted by Sarah Ball, Mark Bond, and Roger Stash. The project was conducted under the auspices of U.S.D.I. (FLPMA) Permit No. 02-UT-60122 and State of Utah Antiquities Project (Survey) No. U-02-MQ-0590p issued to MOAC, Moab, Utah.

A file search for previous inventories and documented cultural resources was performed by Keith Montgomery (August 30, 2002) at the BLM Price River Field Office. The result of the consultation indicated that various archaeological projects have been completed in the area. In 1997, Alpine Archaeological Consultants conducted a cultural resource inventory of the Utah Department of Transportation's State Road 157 Improvement Project (Reed, Horn, and Chandler 1997). The inventory resulted in the documentation of four historic sites and two isolated finds of artifacts: newly recorded sites 42Cb1084, 42Cb1085, 42Cb1086 and previously recorded site 42Cb535. Site 42Cb1084 is an historic masonry culvert at Milepost 2.6, evaluated as eligible to the National Register of Historic Places (NRHP) under criterion C. Site 42Cb1085 is an historic artifact scatter evaluated as not eligible for inclusion to the NRHP. A second historic masonry culvert at Milepost 3.2, 42Cb1086, is judged to be not eligible to the NRHP because it has been substantially modified. The fourth site, 42Cb535 is an historic artifact scatter determined to be not eligible to the NRHP. Environmental Industrial Services (EIS) inventoried a proposed 40 acre land exchange in 1999 for the BLM, resulting in the documentation of 42Cb1355, a portion of the historic Kenilworth and Helper railroad grade (Fergusson 1999). Also in 1999, MOAC surveyed three well locations for Anadarko Petroleum Corporation in the Helper Field (Montgomery 1999). This inventory resulted in the documentation of a single episode trash dump (42Cb1363) evaluated as not eligible to the NRHP. MOAC completed Anadarko Petroleum's 1999 and 2000 Helper Field Drilling Programs that resulted in the documentation of numerous prehistoric and historic sites (Montgomery,

Montgomery and Wolfe 1999; Montgomery, Kinnear-Ferris and Ball 2000). The 1999 inventory resulted in the documentation of 8 newly-found sites, two previously documented historic sites, and 23 isolated finds of artifacts. Cultural resources evaluated as eligible to the NRHP include three historic sites (42Cb533.3, 42Cb1235.1 and 42Cb1286.1) and one prehistoric site (42Cb1302). Site 42Cb533.3 is a segment of the historic Spring Glen Canal and represents a significant type, period and method of construction. Site 42Cb1235.1 is a segment of the Price to Myton Freight Road, a road that was originally recorded by MOAC in 1998. The road is eligible to the NRHP, although this particular segment retains no integrity and is considered non-contributing. The third eligible historic site, 42Cb1286.1, is a segment of the Price Canal, which represents one of the earliest irrigation systems of the area. Site 42Cb1302 is a prehistoric temporary camp containing a roasting pit and associated diagnostic artifacts. Subsurface testing indicated the site's potential for yielding additional information pertaining to the research domains of the area. The 2000 inventory resulted in the recordation of seven newly-found sites (42Cb1380 through 42Cb1386), one previously recorded site (42Cb1355), and 11 isolated finds of artifacts. Cultural resources evaluated as eligible for inclusion to the NRHP include 42Cb1380 (turn-of-the century habitation), 42Cb1382 (historic landfill associated with Kenilworth), and 42Cb1385 (two segments of the D&RGW Kenilworth Branch railroad grade). 42Cb1355.2 is a segment of the previously recorded historic Kenilworth and Helper railroad line, evaluated as eligible for inclusion to the NRHP. The same year, MOAC revisited the Helper Field to inventory Helper Federal E-3 Alternate 2, Helper Federal E-4 Alternate 2, and the Helper State E-3 to Helper Federal G-2 Pipeline (Ball and Montgomery 2000). This inventory resulted in the documentation of another segment of the Kenilworth and Helper railroad grade (42Cb1355.3). In 2001, MOAC inventoried eight well locations for Anadarko Petroleum, documenting two new historic sites (42Cb1583 and 42Cb1588), and locating seven previously recorded sites (42Cb533, 42Cb535, 42Cb1084, 42Cb1085, 42Cb1086, 42Cb1355, and 42Cb1385) (Montgomery and Kinnear-Ferris 2001). Site 42Cb1385.3 is a segment of the D&RGW Kenilworth Branch railroad grade evaluated as eligible for inclusion to the NRHP under Criterion (a).

DESCRIPTION OF PROJECT AREA

The project area is situated in Anadarko Petroleum's Helper Gas Field, near the town of Kenilworth, Carbon County, Utah. The inventory included three proposed well locations with associated access and pipeline corridors (Figure 1). The legal description is T 13S, R10E, Sections 20 and 21.

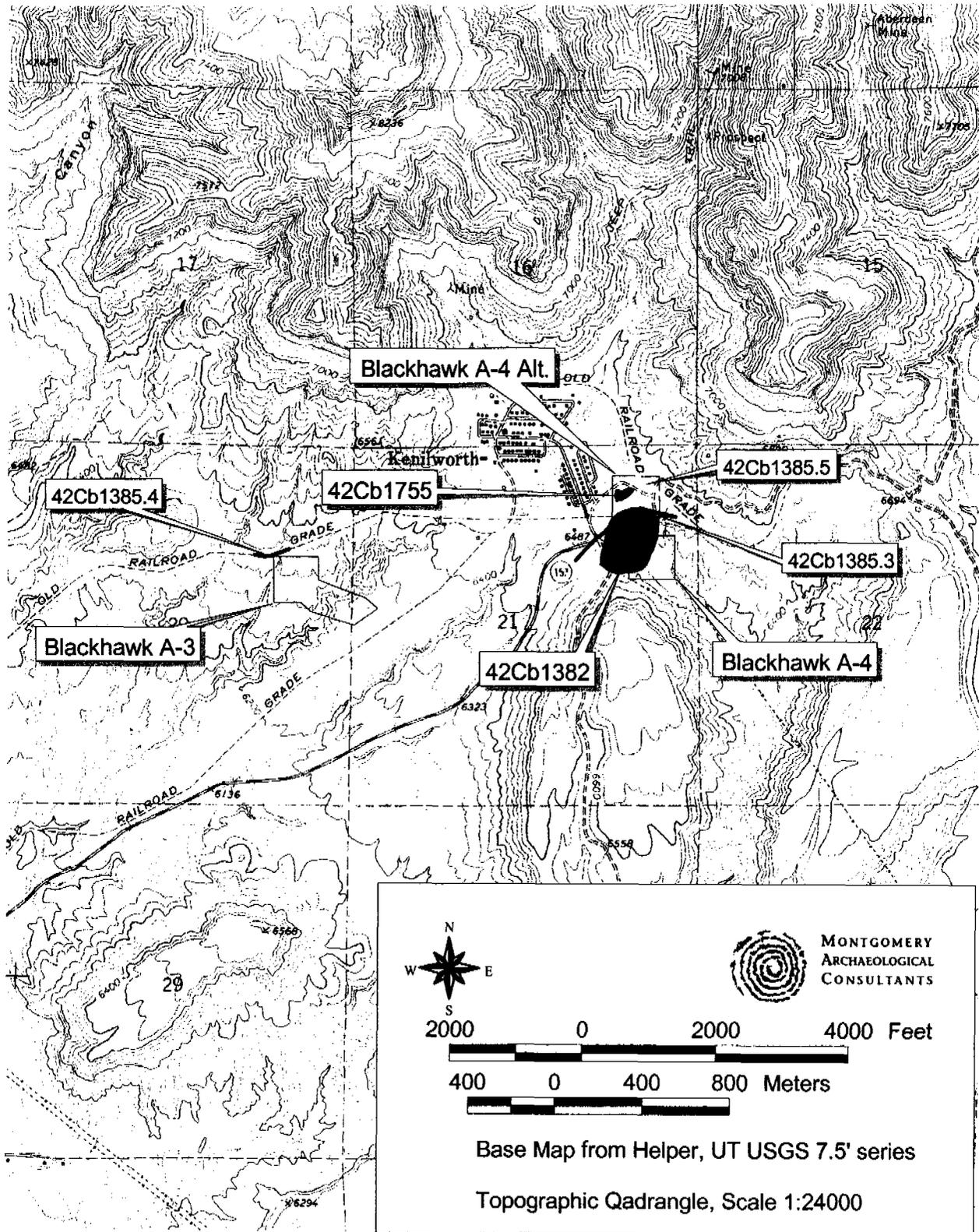


Figure 1. Inventory of Anadarko Petroleum's Helper Field Blackhawk A-3, Blackhawk A-4, and Blackhawk A-4 Alternate 1 Well Locations. USGS 7.5' Helper, UT 1972. Scale 1: 24000.

Table 1. Legal Descriptions and Cultural Resources.

Well Number	Legal Location	Location at Surface	Access/Pipeline Corridor	Cultural Resources
Blackhawk A-3	T 13S R 10E, S. 20	1998' FNL 821' FEL	Access/Pipeline 900'	42Cb1385.4
Blackhawk A-4	T 13S R 10E, S. 21		Access in 10 Acre	42Cb1382
Blackhawk A-4 Alternate 1	T 13S R 10E, S. 21	835' FNL 881' FEL	Access/Pipeline 500'	42Cb1385.3, 42Cb1385.5, 42Cb1755

In general, the project area lies in the uplands and margins of the Price River Valley, just to the south of the town of Kenilworth. The study area lies within the Mancos Shale Lowlands and Book Cliff-Roan Plateau physiographic subdivisions of the Colorado Plateau (Stokes 1986). The topography of the area is characterized by north-south trending ridges and narrow canyons. Named features in the area include Warehouse Canyon, Meads Wash, Cardinal Wash, and Deadman Creek. The project area is composed mainly of the Cretaceous Mancos Shale formation. From oldest to youngest, the named units of the Mancos Shale are Tununk shale, Ferron sandstone, Blue Gate shale, Emery sandstone and Musuk shale. Older alluvial deposits cap the ridges at higher elevations near Kenilworth. Situated within the Upper Sonoran life zone, the uplands are characterized by a pinyon-juniper woodland, and the lower elevations are dominated by a shadscale and sagebrush community. Plant species observed in the area include pinyon, juniper, shadscale, sagebrush, blackbrush, mountain mahogany, Mormon tea, cliffrose, rabbitbrush, yucca, prickly pear cactus, winterfat and various grasses. The nearest permanent water source is the Price River, situated two miles to the west, and various intermittent drainages occur in the inventory area. Modern impacts to the study area include roads, overhead power lines, and livestock grazing.

Cultural Overview

In the summer of 1877, the Price River was explored by the Tidwell party who described the land as excellent, although they thought controlling the streams would be difficult (Watt 1997:22). Prior to this time Mormon settlement in southeastern Utah was averted because of the Black Hawk War (1865-1868). The first permanent settlers in the Price River Valley came from Salem, Utah Valley, arriving between 1877 and 1878. These individuals included Caleb B. Rhoades, James D. Gay, Frederick E. Grames, and Charles W. Grames who built dugouts and log cabins in the Price area (Horsely 1984:3). The first colonies in Carbon County were established as agrarian settlements with farming and ranching the primary economic pursuits. For the first few years the emphasis was on subsistence crops to feed the settlers and their domestic livestock.

Coal mining began in Utah in the mid-nineteenth century. Early settlers discovered coal in 1849 at Coalville, 40 miles east of Salt Lake City. In 1882, the Denver and Rio Grande Western (D&RGW) railroad extended its narrow gauge line into Utah. As the railroad was changing to standard gauge rails, railroad officials decided a freight terminal and center for attaching "helper" engines was required in the area. Around 1887 the railroad built 7 residences, a bunkhouse, and a passenger station in what became Helper (Watt 1997:38). The first of the independent coal companies was organized in 1906: the Independent Coal and Coke Company. Prior to this time most of the coal development in Carbon County was monopolized by the D&RGW's Utah Fuel Company (Nielson and Merrill 1983:1-2). Mining operations by the Independent Coal and Coke Company commenced at Kenilworth in 1907, with coal being shipped over its railroad between the mining complex at Kenilworth and the town of Spring Glen (Kenilworth & Helper line). This railroad line was situated on a steep grade with sharp curves, and a special locomotive was required to pull the coal cars. In 1926, the Denver and Rio Grand Western built a new railroad line between Kenilworth and Helper, thus ending use of the Kenilworth & Helper line (Watt 1997:108-129). The coal mining industry experienced an economic downfall after World War I until 1940. In 1951, the Independent Coal & Coke Company purchased the holdings of the Utah Fuel Company, and thus acquired the Clear Creek mine and the Castle Gate mine and coal washing plant. In 1959-60, a tunnel was constructed from the Kenilworth mine to the Castle Gate mine and washer, thus eliminating the need to haul the Kenilworth coal around the mountain.

Settlement in the project area commenced around 1906 when the Independent Coal and Coke Company began operations at the Aberdeen Mine, followed by the Royal Blue and Kenilworth mines. By 1910 the company employed 485 men and the company-owned town of Kenilworth was developed on the flats south of the tipple with a population of 750 people (Nielson and Merrill 1983:16). In Kenilworth the house lots were relatively large with many landscaped lawns and small gardens. There was no private ownership of land, although individuals might be permitted to construct businesses or residences on company-owned land. Also the company dominated all economic activities either through company-operated stores and businesses or private enterprises that operated by permission of the coal company (Powell 1981:14). Mining companies in the county built stores where the miners could purchase food and clothing. Because of their lack of transportation, most families made most of their purchases at company stores and did not travel regularly to Helper or Price (Watt 1997:186). The main business in the town was the Kenilworth Mercantile Company store which in 1918 boasted 8,000 sq. feet of floor space and sold groceries, hardware, dry goods, furniture, clothing, hats, caps, crockery, powder and auto supplies, with an inventory of \$45,000. The employees at the Kenilworth mines consisted of various immigrant heritages including Greeks, Italians, Japanese, Slovenians, and Germans. In 1920 Kenilworth had 316 foreign born, who had 242 children, totaling 558, or 67 % of the total towns population (Watt 1997:211). The mines at Kenilworth were closed in 1960, although the town is still occupied by individuals occupying privately-owned residences.

SURVEY AND TESTING METHODOLOGY

An intensive pedestrian survey was performed for this project which is considered 100% coverage. At each of the well locations, a 10-acre square parcel was defined, laid out on the cardinal directions and centered on the well pads center stake. The interiors of the parcels were examined for cultural resources with a series of parallel sweeps, spaced at 10 meter (30 foot) intervals. The access and pipeline corridors were 400 feet wide, surveyed by walking zig-zag and parallel transects along the staked centerline, spaced no more than 10 meters (30 ft) apart. A total of 42.7 acres were inventoried, all of which occurs on private property.

Cultural resources were recorded as either an archaeological site or isolated find of artifact. Archaeological sites were defined as spatially definable areas with features and/or ten or more artifacts. Sites were documented by the archaeologists walking transects across the site, spaced no more than 3 meters apart, and marking the locations of cultural materials with pinflags. This procedure allowed clear definition of site boundaries and artifact concentrations. At the completion of the surface inspection, a transit was employed to point-provenance diagnostic artifacts and other relevant features in reference to the site datum. Archaeological sites were plotted on a 7.5' USGS quadrangle, photographed, with site data entered on an Intermountain Antiquities Computer System (IMACS, 1990 version) inventory form (Appendix A). Isolated finds are defined as individual artifacts or light scatter of items, which lack sufficient material culture to warrant IMACS forms, or to derive interpretation of human behavior in a cultural and temporal context. All isolated artifacts were plotted on a 7.5' USGS map and described in this report.

INVENTORY RESULTS

The inventory of Anadarko Petroleum's Helper Field Blackhawk A-3, Blackhawk A-4, and Blackhawk A-4 Alternate 1 well locations resulted in the documentation of one newly-found archaeological site (42Cb1755), two segments of a railroad (42Cb1385.4 and 42Cb1385.5), and re-visitation of a previously documented site (42Cb1382) and previously-documented railroad segment (42Cb1385.3).

Smithsonian Site No.: 42Cb1382
Jurisdiction: Private
Photographs: Roll 02-131/1: 15-17
NRHP Eligibility: Eligible Criterion (d)

Description: Site 42Cb1382 was originally recorded on October 24, 1999 by MOAC for Anadarko Petroleum's 2000 Helper Field Drilling Program (Montgomery, Kinnear-Ferris, and Ball 2000). This site is an extensive trash disposal site associated with the town of Kenilworth. The mines in Kenilworth were in operation around 1906 with the company-owned town being built shortly thereafter. Nine more or less discrete trash dumps (Concentrations A through I) were documented within a 32987 sq. meter area. The cultural

materials are described according to the concentrations. A large portion of the trash was transported to the area in barrels and dumped along the various two-track roads. Based on datable artifacts the earliest trash clusters (Concentration C, D, F and G) are associated with the old road which linked Kenilworth to Price. Datable artifacts in these dumps range temporally from around 1890 to 1930, although the earliest artifacts pre-1900 appear to be curated items (ceramic dishes). The most recent dumps are Concentrations A, B and H with most artifacts dating between 1930 and 1960. In particular, Concentration H overlies the abandoned D&RGW Kenilworth Branch railroad (circa 1927-1961). All classes of domestic trash were represented at the site including: hole-in-top and sanitary tin cans (milk, olive oil, meat, fish, juice, fruit, vegetables, tobacco, coffee, cocoa); ceramics (earthenware, semi-porcelain, crockery); glass (soda, alcohol, medicine, canning, condiment, cleaning, vessels); faunal remains (cow, elk, deer, goat, sheep, rabbit and bird) and miscellaneous items (wash tubs, stove parts, leather shoes, cow bell, baby stroller, thermos, bed pan, kettles, milled lumber, bricks, barrels, clock parts, sewer pipe). Similar ceramic and decorative glass items were observed across the landfill suggesting that the vessels may have been purchased at the same company-owned store (e.g., Kenilworth Mercantile Company). This landfill is still being used by the locals for discarding large and small items.

The site was revisited during the inventory of Anadarko Petroleum's Helper Field Blackhawk A-3 (Alternate 1) and Blackhawk A-4 Well Locations, resulting in the realization that during MOAC's original documentation of the site, a trash concentration (Concentration I) had been plotted on the site map, but not included in the descriptive parts of the site form. An addendum was completed at the time this report was written, describing Concentration I.

The concentration is located at the northwest part of the site, along the bed of a dismantled railroad spur. It measures 35 ft across by 190 ft long and contains several barrel dumps including coal clinkers and some burned artifacts. The dump appears to contain depth, as a couple of small vandal holes are noted. Artifacts include tin cans, glass, ceramics, and various miscellaneous items, dating between 1903 and the 1960s, with some modern trash also present.

Smithsonian Site No.: 42Cb1385.3
Temporary Site No.: MOAC 554-9
Legal Description: T13S, R 10 E, Section 19
Jurisdiction: Private
NRHP Eligibility: Eligible Criterion (a)

Description: This site consists of a segment of the D&RGW Kenilworth Branch abandoned railroad grade which dates from 1927 to about 1961. The Independent Coal and Coke Company began mining operations at Kenilworth in 1906, and shipped its first coal in 1907 on a Rio Grande Western railroad line between Kenilworth and Spring Glen (Kenilworth & Helper line). This line remained in operation until 1926 when the Denver and Rio Grande Western replaced it with a new railroad north of Helper, thereby eliminating the steep

grades and sharp curves (Watt 1997:113). This railroad was abandoned by 1961 when the Kenilworth and Castle Gate mines were connected by an underground tunnel. At that time, coal from Kenilworth was transported via the tunnel to the washer and preparation plant at Castle Gate (Watt 1997:125). Segment 3 is located at T 13S, R 10E, Section 20. The raised railroad grade averages 12 feet from the base to the top, and the top measures 12 to 16 feet wide. The bottom is 45 to 50 feet wide. All of the rails and ties have been removed. There are twelve 6" spikes on top of the slopes. Three powder cans (9-1/2" diameter, 10-1/2" height) are observed at the site. The cans have a spout opening and the words "25 LBS" and "EXPLOSIVE" are present.

Smithsonian Site No.: 42Cb1385.4
Jurisdiction: Private
Photographs: Roll 02-131/1: 6-8
NRHP Eligibility: Eligible Criterion (a)

Description: This site consists of a segment of the D&RGW Kenilworth Branch abandoned railroad grade which dates from 1927 to about 1961. According to the historical record, the Independent Coal and Coke Company began mining operations at Kenilworth in 1906, and shipped its first coal in 1907 on a Rio Grande Western railroad line between Kenilworth and Spring Glen (Kenilworth & Helper line). This line remained in operation until 1926 when the Denver and Rio Grande Western replaced it with a new railroad north of Helper, thereby eliminating the steep grades and sharp curves (Watt 1997:113). This railroad was abandoned by 1961 when the Kenilworth and Castle Gate mines were connected by an underground tunnel. At that time, coal from Kenilworth was transported via the tunnel to the washer and preparation plant at Castle Gate (Watt 1997:125). Segment 4 is located west of Kenilworth and consists of a raised railroad bed contained in an excavated dugway. At the east end of the segment, the dugout measures 64' wide by 9' deep; at the west end of the segment the dugway measures 64' wide and ca. 8' deep. The slightly raised railroad bed measures 12' wide. This segment of the railroad bed is currently used as an ATV trail. At UTM 515484E/4392455N, a culvert has been placed beneath the railroad bed at a 9° angle. The raised railroad bed at this location is 9' high and ca. 90' in length. A railroad tie beam is lying in the drainage nearby. Artifacts found in association with this segment of the railroad include five powder cans (9-1/4" diameter by 10-1/2" H), railroad rail fragments, and three square metal plates measuring 8-1/2x7" with 3 square openings in the plates.

Smithsonian Site No.: 42Cb1385.5
Jurisdiction: Private
Photographs: Roll 02-131/1: 1-5
NRHP Eligibility: Eligible Criterion (a)

Description: This site consists of a segment of the D&RGW Kenilworth Branch abandoned railroad grade which dates from 1927 to about 1961. According to the historical record, the Independent Coal and Coke Company began mining operations at Kenilworth in 1906, and shipped its first coal in 1907 on a Rio Grande Western railroad line between Kenilworth and Spring Glen (Kenilworth & Helper line). This line remained in operation until 1926 when the Denver and Rio Grande Western replaced it with a new railroad north of Helper, thereby eliminating the steep grades and sharp curves (Watt 1997:113). This railroad was abandoned by 1961 when the Kenilworth and Castle Gate mines were connected by an underground tunnel. At that time, coal from Kenilworth was transported via the tunnel to the washer and preparation plant at Castle Gate (Watt 1997:125). Segment 5 is located east of Kenilworth and is a spur railroad connecting the main railroad to the mining operation. At the east end of the segment, the raised railroad bed measures ca. 17' in height. A 33" diameter culvert cemented into a masonry wall is located about 6 ft east of the raised railroad bed. The masonry wall is oriented E-W and is ca. 7' long by ca. 9' high. On the south side of the wall, on each end, there are protruding masonry wing walls measuring 5' x 7'. The west end of the segment consists of a railroad bed cut into a pinyon-juniper covered slope. The bed measures approximately 40' wide by 4' high. This portion of the segment is covered with coal slags and some modern trash. One badly deteriorate but intact railroad tie beam was observed at UTM 517213E/4392775N, measuring ca. 7' long by 5-1/2" wide. Other railroad tie beam fragments (ca. 5+) are found along both sides of this end of the segment. Three railroad spikes were also noted.

Smithsonian Site No.: 42Cb1755
Temporary Site No.: MOAC 02-131-1
Jurisdiction: Private
Photographs: Roll 02-131/1: 9-14
NRHP Eligibility: Eligible Criterion (d)

Description: The site consists of two single-room structures, a trash concentration, and scattered trash, and appears to date between ca. 1935 and the early 1960s. Artifacts are located around and in each structure, and in the concentration (Concentration 1), situated in a drainage near Structure 2. Due to the proximity of the mining town of Kenilworth, and the prevalence of documented mining-related sites in the near vicinity, it is possible that these unidentified structures are also mining-related. Structure 1 is a cinder block and concrete single-room structure with a rectangular shape. It measures 20 ft by 5 ft, oriented with the long axis at 288 degrees. The cinder blocks measure 8" x 8" x 16", and are laid in a staggered bond style. The cells of the blocks are filled with concrete. The concrete is light colored with a 1/8" to 1" aggregate. Most of the north wall is buried. The east and west walls are deteriorated down to one course. Only the southeast lintel (4 1/2" x 8" concrete) remains. A 6' by 7' section of a 4" thick concrete roof, with two layers of 6"

reinforcing wire mat, is laying on top of the southeast corner of the structure. A 3/4" rebar runs through the end of the roof, with the wire mat tied to it with No. 9 galvanized wire. The top of the structure appears to have been 8" to 20" above mgs.

Structure 2 is roughly identical to Structure 1. It is a cinder block and concrete single-room structure with a rectangular shape. It measures 19 ft by 8 ft, oriented with the long axis running north-south. The cinder blocks measure 8" x 8" x 16", and are laid in a staggered bond style. The cells of the blocks are filled with concrete. The concrete is light colored with a 1/8" to 1" aggregate. One to two courses remain, capped with a 4 1/2" high by 8" wide concrete lintel on the long walls. A broken lintel lies just to the south of the south wall. On the north end are the remains of a 4" thick concrete roof with two layers of 6" reinforcing wire mat. A 3/4" rebar runs through the end of the roof, with the wire mat tied to it with No. 9 galvanized wire. The top of the structure appears to have been 8" to 20" above mgs. A 3 ft by 1 ft concrete step is connected to the inside of the east wall 12" below the top of the lintel. The interior of the structure is partially filled with debris, including a pile of coal clinkers from a stove.

Concentration 1 is a trash dump, located 7 meters to the northwest of Structure 2, in a drainage. Trash, some of which is partially buried, extends approximately 12 ft across, and 60 ft down the drainage. Most of the trash appears to be from a single-episode dump, although a few of the artifacts appear to be more recent. Across the site, tin cans are dominated by church key-opened beer cans (n=ca. 127+), with sanitary commodity cans, both can-opened (n=3) and cut-around (n=2), a church key-opened juice can, a hole in top evaporated milk can, paper-sided motor oil cans with pull-tab openings (n=7), a quart-size church key-opened motor oil can stamped with "SAE 10-20W", and tin can fragments also present. Glass fragments are common, and include: pieces of brown beer bottles (n=ca. 275+), clear soda bottles and jars (n=85), unidentified clear glass (n=11), pieces of aqua soda bottles (n=30), unidentified aqua glass (n= 10), 35+ pieces of a green liquor bottle, a fragment of a dark green wine bottle, a piece of a brown medicinal bottle, pieces of a cream milk glass cosmetic jar (n=3), and unidentified aqua, light aqua, green, bright green, clear, and cobalt vessels. Trademarks on bottle bases are from the Owens-Illinois Glass Co. (1940-1954 and post 1954). One piece of ceramic is present, located in Concentration 1. It is a thick semivitreous sherd of unidentified function. Miscellaneous artifacts include: chicken wire, 1/4" wire, 1/8" wire, a car air filter, a deteriorating baseball cap, canning jar lids (some stamped with "Kerr"), milled lumber (some with nails attached), a barrel hoop (1 1/4" x 18"), a piece of a yellow-painted rain gutter attached to milled lumber, a stove pipe, a tin and milled lumber water trough, an unidentified metal piece, bottle caps, a mostly-buried enamel wash basin, and a metal condiment jar lid. Modern trash is scattered across the site, and includes aluminum-top beer cans, bottle glass, pieces of plastic, and clay pigeons.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

The National Register Criteria for Evaluation of Significance and procedures for nominating cultural resources to the National Register of Historic Places (NRHP) are outlined in 36 CFR 60.4 as follows:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, material, workmanship, feeling, and association, and that they:

- a)...are associated with events that have made a significant contribution to the broad patterns of our history; or
- b)...are associated with the lives of persons significant to our past; or
- c)...embody the distinctive characteristics of a type, period, or method of construction; or that represents the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d)...have yielded or may be likely to yield information important in prehistory or history.

The cultural resource inventory resulted in the documentation of one newly-found archaeological site (42Cb1755), two segments of a railroad (42Cb1385.4 and 42Cb1385.5), and re-visitation of a previously documented site (42Cb1382) and previously-documented railroad segment (42Cb1385.3). All of the sites are recommended as eligible to the NRHP. Site 42Cb1755 consists of two possibly mining-related single-room structures, a trash concentration, and scattered trash, and appears to date between ca. 1935 and the early 1960s. It is recommended as eligible to the NRHP under Criterion (d), as there is potential for further research. Artifacts are partially buried in sand, both within, and near the structures, and in Concentration 1, and continued research could address the question of site function and age. The D&RGW Kenilworth Branch railroad grade (42Cb1385.1 and 42Cb1385.2) was originally documented by MOAC in 1999 as part of the inventory for Anadarko Petroleum's Helper Field 2000 Drilling Program (Montgomery, Ferris, and Ball 2000). The railroad was evaluated as eligible under Criterion (a) because it is considered significant for its association with events and broad patterns important to local history. Another segment of the railroad grade was documented by MOAC in 2001 (42Cb1385.3), and was re-visited during the current inventory (Montgomery and Kinnear-Ferris 2001). Two new segments of the railroad grade were recorded during the current inventory (42Cb1385.4 and 42Cb1385.5). Each of the segments are considered eligible to the NRHP under Criterion (a). Site 42Cb1382 was originally documented by MOAC in 1999 (Montgomery, Ferris, and Ball 2000). The site was revisited during the current inventory. It is a large historic garbage dump associated with the mining town of Kenilworth. The site was determined to be eligible to the NRHP under Criterion (d), since it exhibited some temporal horizontal and vertical stratification (based on surface examination and testing conducted in 1999), and could provide a unique opportunity to study the material remains from a mining town occupied by a diverse ethnic population and a particular economic group.

MANAGEMENT RECOMMENDATIONS

The cultural resource inventory of Anadarko Petroleum's Blackhawk A-3, Blackhawk A-4, and Blackhawk A-4 Alternate 1 well locations resulted in the documentation of one newly-found archaeological site (42Cb1755), two segments of a railroad (42Cb1385.4 and 42Cb1385.5), and re-visitation of a previously documented site (42Cb1382) and railroad segment (42Cb185.3). The undertaking will avoid site 42Cb1755 and railroad segments 42Cb1385.4 and 42Cb1385.5. Site 42Cb1382 and railroad segment 42Cb1385.3 will be crossed by the access road to the Blackhawk A-4 Alternate 1 well location. At site 42Cb1382, all artifact concentrations will be avoided by the road. In the case of the railroad segment, the undertaking is considered to not effect the characteristics which make the historic property eligible (Criterion a). Hence, a determination of "no historic properties affected" is proposed for this project.

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1997 *A History of Carbon County*. Utah State Historical Society and Emery County Commission.

APPENDIX A

**SITES 42Cb1382, 42Cb1385.3, 42Cb1385.4, 42Cb1385.5, AND 42Cb1755
INTERMOUNTAIN ANTIQUITIES COMPUTER SYSTEM (IMACS) SITE FORMS**

On File At:

**Utah Division of State History
Salt Lake City, Utah**

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 03/20/2003

API NO. ASSIGNED: 43-007-30914

WELL NAME: BLACKHAWK A-3

OPERATOR: ANADARKO PETROLEUM CORP (N0035)

CONTACT: CARLA GHAZIZADEH

PHONE NUMBER: 832-636-3315

PROPOSED LOCATION:

SENE 20 130S 100E
SURFACE: 1998 FNL 0821 FEL
BOTTOM: 1998 FNL 0821 FEL
CARBON
HELPER (18)

LEASE TYPE: 4 - Fee

LEASE NUMBER: FEE

SURFACE OWNER: 4 - Fee

PROPOSED FORMATION: FRSD

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	DKD	4/10/03
Geology		
Surface		

LATITUDE: 39.68262

LONGITUDE: 110.81826

RECEIVED AND/OR REVIEWED:

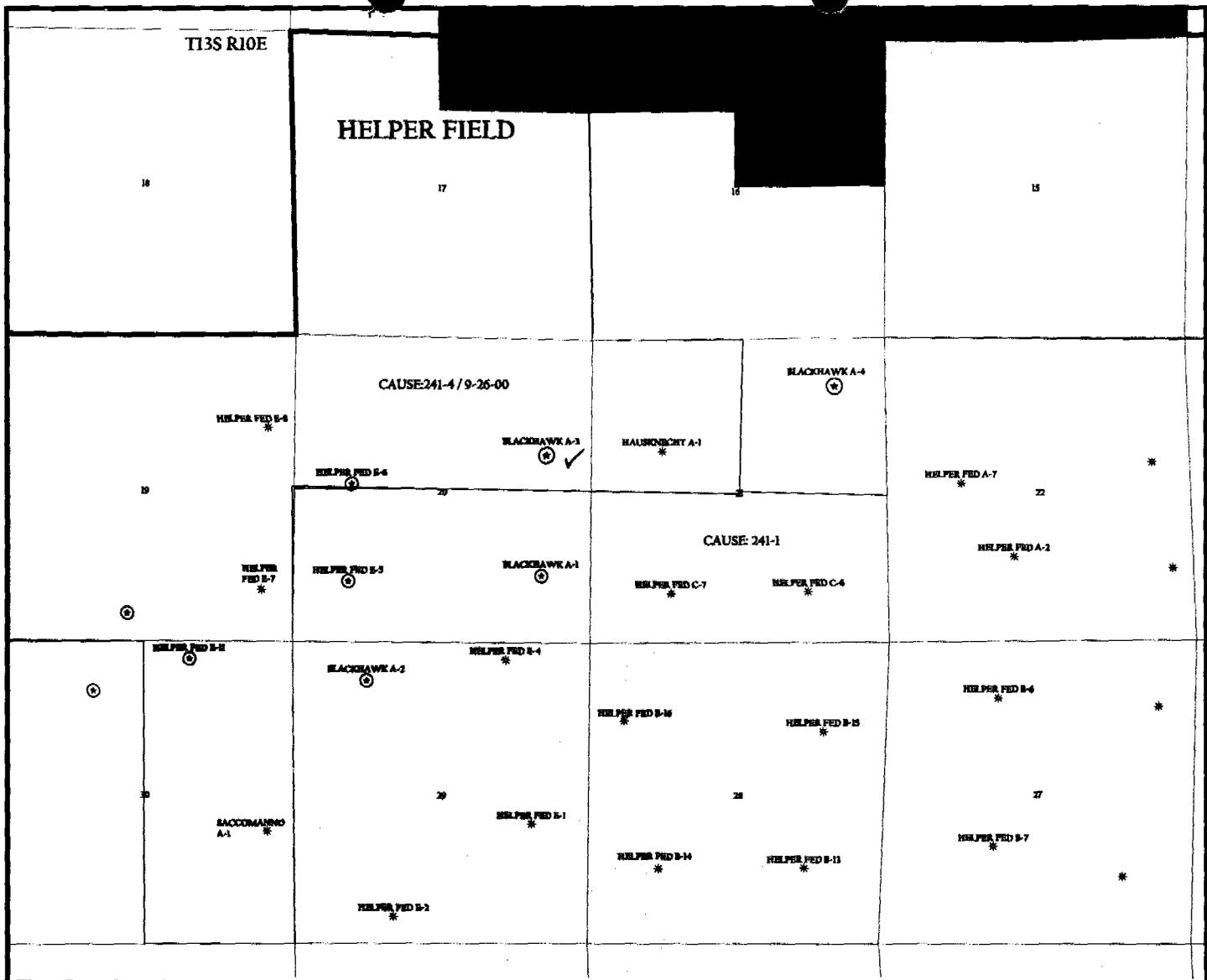
- Plat
- Bond: Fed[] Ind[] Sta[] Fee[4]
(No. 224351)
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit
(No. MUNICIPAL)
- RDCC Review (Y/N)
(Date:)
- Fee Surf Agreement (Y/N)

LOCATION AND SITING:

- R649-2-3.
Unit _____
- R649-3-2. General
Siting: 460' From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit
Board Cause No: 241-4 (160')
Eff Date: 4-26-00
Siting: 460' fr outer boundary, 46' 920' fr other wells.
- R649-3-11. Directional Drill

COMMENTS: Needs Permit (Recd 4/3/02)

STIPULATIONS: ① Surface casing Cont Stop
② STATEMENT OF BASIS



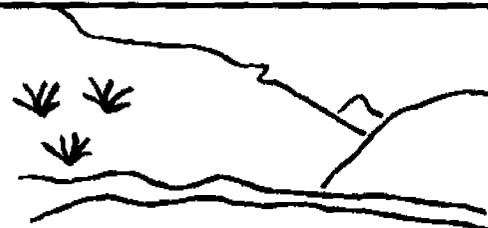
OPERATOR: ANADARKO PETRO CORP (N2115)

SEC. 20 T13S, R10E

FIELD: HELPER (18)

COUNTY: CARBON

CAUSE: 241-4 / 9-26-00



Utah Oil Gas and Mining

WELLS

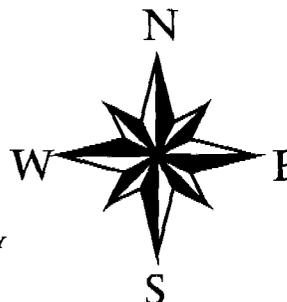
- / GAS INJECTION
- GAS STORAGE
- × LOCATION ABANDONED
- ⊙ NEW LOCATION
- ◊ PLUGGED & ABANDONED
- * PRODUCING GAS
- PRODUCING OIL
- ◊ SHUT-IN GAS
- ◊ SHUT-IN OIL
- × TEMP. ABANDONED
- ◊ TEST WELL
- ▲ WATER INJECTION
- ◊ WATER SUPPLY
- / WATER DISPOSAL

UNIT STATUS

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

FIELD STATUS

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED
- COUNTY BOUNDARY
- SECTION LINES
- TOWNSHIP LINES



PREPARED BY: DIANA MASON
DATE: 20-MARCH-2003

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

OPERATOR: Anadarko Petroleum Corp.
WELL NAME & NUMBER: BlackHawk A-3
API NUMBER: 43-007-30914
LEASE: Fee **FIELD/UNIT:** _____
LOCATION: 1/4, 1/4 SENE **Sec:** 20 **TWP:** 13S **RNG:** 10E 1998 FNL 821 FEL
LEGAL WELL SITING: 460 F SEC. LINE; 460 F 1/4 LINE; 920 F ANOTHER WELL.
GPS COORD (UTM): X = 515544 E; Y = 4392422 N S
SURFACE OWNER: Black Hawk Coal Company.

PARTICIPANTS

M. Jones (DOGM), Jim Hartley (Anadarko), Johnny Pappas (surface).
Carbon County was invited but chose not to attend the on-site meeting.

REGIONAL/LOCAL SETTING & TOPOGRAPHY

The proposed location lies ~2.5 miles East of Spring Glen, Utah and ~1 mile West of Kenilworth, Utah. The closest live, year-round water source is the Price River, located ~2 miles to the west. The direct area drains to the west into the Price River. Other water sources such as dry washes, the Spring Glen irrigation system, and municipal drinking water systems are located within a 1 miles radius of the proposed gas well. Access to the location will come from the southeast using county roads and existing gas field roads built and maintained by Anadarko Petroleum Company. New access to be built will consist of ~.3 mile. The soil consists primarily of gravely clay loam.

SURFACE USE PLAN

CURRENT SURFACE USE: Wildlife habitat and grazing.

PROPOSED SURFACE DISTURBANCE: 155'x270' w/ a 80'x30'x10' pit. (interior).

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: 5 proposed gas wells and 7 producing gas wells are located within a 1 mile radius of the above mentioned well.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: Along roadside.

SOURCE OF CONSTRUCTION MATERIAL: Obtained locally and transported in.

ANCILLARY FACILITIES: None anticipated.

WASTE MANAGEMENT PLAN:

Portable chemical toilets which 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. Crude oil production is unlikely. Drilling fluid, completion / frac fluid and cuttings will be buried in the pit after evaporation and slashing the pit liner. Produced water will be gathered to the evaporation pit and eventually injected into the Navajo Sandstone via a salt-water disposal well. Used oil from drilling operations and support is hauled to a used oil recycler and reused.

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: Dry washes draining eventually to the Price River ~2 miles West.

FLORA/FAUNA: Pinion Juniper, sagebrush, Mtn. Mahogany, Brigham Tea, deer, small game, rodents.

SOIL TYPE AND CHARACTERISTICS: Gravelly clay loam.

EROSION/SEDIMENTATION/STABILITY: Erosive when disturbed.

PALEONTOLOGICAL POTENTIAL: None observed.

RESERVE PIT

CHARACTERISTICS: Dugout earthen pit.

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

SURFACE RESTORATION/RECLAMATION PLAN

As per surface use agreement.

SURFACE AGREEMENT: Has been signed.

CULTURAL RESOURCES/ARCHAEOLOGY: Completed and on file.

OTHER OBSERVATIONS/COMMENTS

ATTACHMENTS

Photos of this location were taken and placed on file.

Mark L. Jones
DOGM REPRESENTATIVE

April 1, 2003 / 1:30 pm
DATE/TIME

**Evaluation Ranking Criteria and Ranking Score
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>0</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 25 (Level I Sensitivity)

Sensitivity Level I = 20 or more; total containment is required.

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

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

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

OPERATOR: Anadarko Petroleum Corp.
WELL NAME & NUMBER: BlackHawk A-3
API NUMBER: 43-007-30914
LOCATION: 1/4,1/4 SENE Sec: 20 TWP: 13S RNG: 10E 1998 FNL 821 FEL

Geology/Ground Water:

Significant volumes of high quality ground water are unlikely to be encountered at this location. A moderately permeable soil is likely to be developed on the Quaternary / Tertiary Pediment Mantle covering the Blue Gate Member of the Mancos Shale, but it does not appear to be charged with any significant volume of groundwater. The proposed casing and cementing program should adequately isolate any zones of fresh water that may be penetrated. No water rights have been filed within a mile of the location.

Reviewer: Christopher J. Kierst

Date: 4/7/2003

Surface:

The proposed location lies ~2.5 miles East of Spring Glen, Utah and ~1 mile West of Kenilworth, Utah. The closest live, year-round water source is the Price River, located ~2 miles to the west. The direct area drains to the west into the Price River. Other water sources such as dry washes, the Spring Glen irrigation system, and municipal drinking water systems are located within a 1 miles radius of the proposed gas well. Access to the location will come from the southeast using county roads and existing gas field roads built and maintained by Anadarko Petroleum Company. New access to be built will consist of ~.3 mile. The soil consists primarily of gravely clay loam. Johnny Pappas (surface) was in attendance for the on-site. Carbon County was invited but chose not to attend this on-site meeting.

Reviewer: Mark L. Jones

Date: April 3, 2003

Conditions of Approval/Application for Permit to Drill:

1. Drainage crossing protected with culverts and natural runoff diverted away from the location.
2. A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.

UTAH DIVISION OF WATER RIGHTS
WATER RIGHT POINT OF DIVERSION PLOT CREATED MON, APR 7, 2003, 9:00 AM
PLOT SHOWS LOCATION OF 0 POINTS OF DIVERSION

PLOT OF AN AREA WITH A RADIUS OF 5280 FEET FROM A POINT
S 1998 FEET, W 821 FEET OF THE NE CORNER,
SECTION 20 TOWNSHIP 13S RANGE 10E SL BASE AND MERIDIAN

PLOT SCALE IS APPROXIMATELY 1 INCH = 2000 FEET

N O R T H

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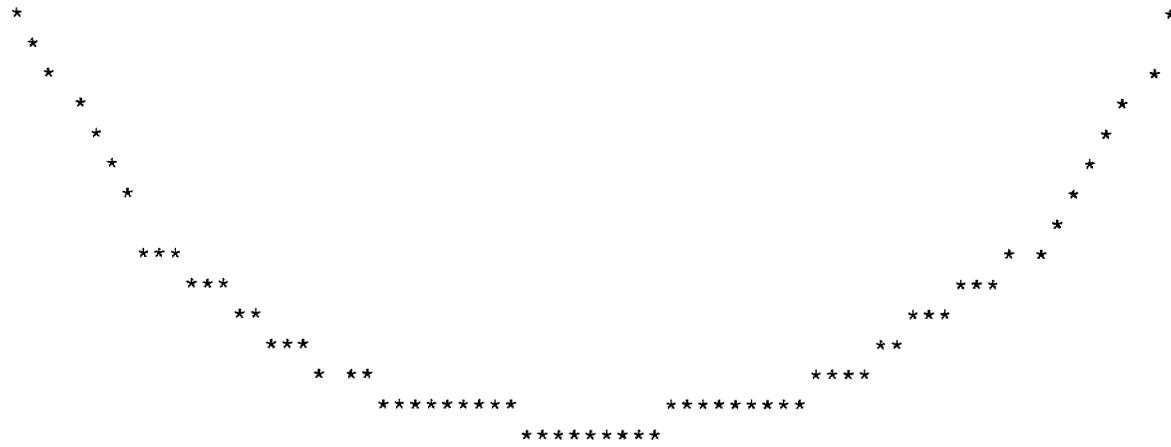
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04-03 Anadarko Blackhawk-3

Casing Schematic

Surface

Energy

8-5/8"
MW 8.3
Frac 19.3

TOC @
80.

Surface
300. MD

w/20% washout
* surface strip

BOP

$$\frac{\text{BOP}}{(0.052)(\frac{4345}{9})} = 2033 \text{ psi}$$

$$\frac{\text{Gas}}{(0.12)(4345)} = 521 \text{ psi}$$

MAASP = 1512 psi

2700'
Bluegates

Zm BOPE proposed

Adequate DWD 4/9/03

3800'
FERRON

4005'
TUNKS-1/2"
shale MW 8.4

TOC @
3428.

w/250 cf thick

-3607' w/200 cf thick

-3815' - reals

-3945'

Production
4345. MD

w/15% washout

Well name:	04-03 Anadarko Blackhawk A-3	
Operator:	Anadarko Petroleum Corp.	Project ID:
String type:	Surface	43-007-30914
Location:	Carbon County, Utah	

Design parameters:

Collapse
Mud weight: 8.330 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 264 psi
Internal gradient: 0.120 psi/ft
Calculated BHP: 300 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 262 ft

Environment:

H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 69 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 300 ft

Cement top: 80 ft
** Surface Str. p*

Non-directional string.

Re subsequent strings:

Next setting depth: 4,345 ft
Next mud weight: 8.400 ppg
Next setting BHP: 1,896 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 300 ft
Injection pressure: 300 psi

Run Seq	Segment Length (ft)	Size (In)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	300	8.625	24.00	J-55	ST&C	300	300	7.972	14.4

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	130	1370	10.56	300	2950	9.83	7	244	33.90 J

Prepared by: Dustin K. Doucet
Utah Dept. of Natural Resources

Phone: (801) 538-5281
FAX: (801) 359-3940

Date: April 8, 2003
Salt Lake City, Utah

ENGINEERING STIPULATIONS - Surface Casing must be cemented back to surface.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 300 ft, a mud weight of 8.33 ppg The casing is considered to be evacuated for collapse purposes.
Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	04-03 Anadarko Blackhawk A-3		
Operator:	Anadarko Petroleum Corp.		
String type:	Production	Project ID:	43-007-30914
Location:	Carbon County, Utah		

Design parameters:

Collapse

Mud weight: 8.400 ppg
 Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 0 psi
 Internal gradient: 0.436 psi/ft
 Calculated BHP: 1,896 psi
 No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)
 8 Round LTC: 1.80 (J)
 Buttress: 1.60 (J)
 Premium: 1.50 (J)
 Body yield: 1.50 (B)

Tension is based on air weight.
 Neutral point: 3,792 ft

Environment:

H2S considered? No
 Surface temperature: 65 °F
 Bottom hole temperature: 126 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 1,500 ft

Cement top: 3,428 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	4345	5.5	17.00	N-80	LT&C	4345	4345	4.767	149.7

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	1896	6290	3.32	1896	7740	4.08	74	348	4.71 J

Prepared by: Dustin K. Doucet
 Utah Dept. of Natural Resources

Phone: (801) 538-5281
 FAX: (801)359-3940

Date: April 8,2003
 Salt Lake City, Utah

ENGINEERING STIPULATIONS - Surface Casing must be cemented back to surface.
 Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
 Collapse is based on a vertical depth of 4345 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.
 Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.



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

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

Michael O. Leavitt
Governor

Robert L. Morgan
Executive Director

Lowell P. Braxton
Division Director

April 10, 2003

Anadarko Petroleum Corporation
P O Box 1330
Houston, TX 77251-1330

Re: BlackHawk A-3 Well, 1998' FNL, 821' FEL, SE NE, Sec. 20, T. 13 South, R. 10 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 43-007-30914.

Sincerely,

A handwritten signature in black ink, appearing to read "John R. Baza".

John R. Baza
Associate Director

pab
Enclosures

cc: Carbon County Assessor

Operator: Anadarko Petroleum Corporation
Well Name & Number BlackHawk A-3
API Number: 43-007-30914
Lease: Fee

Location: SE NE **Sec.** 20 **T.** 13 South **R.** 10 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

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

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

5. Surface casing shall be cemented to the surface.

DIVISION OF OIL, GAS AND MINING**SPUDDING INFORMATION**Name of Company: ANADARKO PETROLEUM CORPWell Name: BLACKHAWK A-3Api No: 43-007-30914 Lease Type: FEESection 20 Township 13S Range 10E County CARBONDrilling Contractor BOB BEAMAN RIG # ROTARY**SPUDDED:**Date 05/19/03Time 11:00 AMHow ROTARY**Drilling will commence:** _____Reported by HARLAN COLLIERTelephone # 1-435-636-9000Date 05/19/2003 Signed: CHD

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

FORM 6

005

ENTITY ACTION FORM

Operator: Anadarko Petroleum Corporation Operator Account Number: N 0036
 Address: P. O. Box 1330
city Houston
state TX zip 77251-1330 Phone Number: (832) 636-3315

Well 1

AP Number	Well Name	Co.	Sec.	Twp.	Range	County
4300730923	Blackhawk A-1X	seee	20	13	10	Carbon
Action Code	Current Entity Number	New Entity Number	Effective Date	Entity Assignment Effective Date		
A	99999	13798	5/26/2003	6/5/2003		
Comments:						

Well 2

AP Number	Well Name	Co.	Sec.	Twp.	Range	County
Action Code	Current Entity Number	New Entity Number	Effective Date	Entity Assignment Effective Date		
Comments:						

Well 3

AP Number	Well Name	Co.	Sec.	Twp.	Range	County
Action Code	Current Entity Number	New Entity Number	Effective Date	Entity Assignment Effective Date		
Comments:						

ACTION CODES:

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

Carla Ghazizadeh

Name (Please Print)

Signature

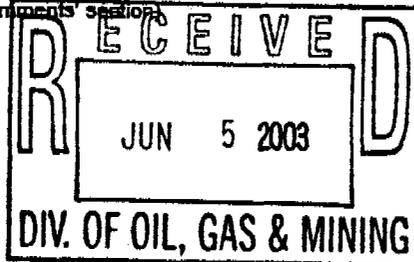
Env. & Reg. Analyst

Title

6/5/2003

Date

(5/2000)



2

006

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

FORM 6

ENTITY ACTION FORM

Operator: Anadarko Petroleum Corporation
Address: P. O. Box 1330
city Houston
state TX zip 77251-1330

Operator Account Number: N 0035
Phone Number: (832) 636-3315

Well 1

API Number	Well Name	QQ	Sec	Twp	Rng	County
4300730914	Blackhawk A-3	sene	20	13	10	Carbon
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date	
A	99999	13794	5/19/2003		6/5/2002	
Comments:						

Well 2

API Number	Well Name	QQ	Sec	Twp	Rng	County
4300730915	Blackhawk A-4	nene	21	13	10	Carbon
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date	
A	99999	13795	5/22/2003		6/5/2003	
Comments:						

Well 3

API Number	Well Name	QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date	
Comments:						

ACTION CODES:

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

Carla Ghazizadeh

Name (Please Print)

Signature

Env. & Reg. Analyst

Title

6/4/2003

RECEIVED

JUN 05 2003

DIV. OF OIL, GAS & MINING

007

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

AMENDED REPORT [] FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL [] GAS WELL [] DRY [] OTHER CBM
b. TYPE OF WORK: NEW WELL [x] HORIZ. LATS. [] DEEP-EN [] RE-ENTRY [] DIFF. RESVR. [] OTHER

5. LEASE DESIGNATION AND SERIAL NUMBER: Fee

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

7. UNIT or CA AGREEMENT NAME: N/A

8. WELL NAME and NUMBER: Blackhawk A-3

2. NAME OF OPERATOR: Anadarko Petroleum Corporation

9. API NUMBER: 4300730914

3. ADDRESS OF OPERATOR: 17001 Northchase Drive CITY Houston STATE TX ZIP 77251 PHONE NUMBER: (832) 636-3315

10 FIELD AND POOL, OR WILDCAT: Helper CBM/Ferron

4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 1998' FNL x 821' FEL AT TOP PRODUCING INTERVAL REPORTED BELOW: AT TOTAL DEPTH: Same As Above

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENE 20 13S 10E

12. COUNTY: Carbon 13. STATE: UTAH

14. DATE SPUDDED: 5/19/2003 15. DATE T.D. REACHED: 6/8/2003 16. DATE COMPLETED: 7/7/2003 ABANDONED [] READY TO PRODUCE [x]

17. ELEVATIONS (DF, RKB, RT, GL): 6329' GL

18. TOTAL DEPTH: MD 4,165 TVD 19. PLUG BACK T.D.: MD 4,110 TVD 20. IF MULTIPLE COMPLETIONS, HOW MANY? n/a

21. DEPTH BRIDGE MD PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) GR, BD, ND/DP, SP, IND, CCL, CBL Rec. 7-7-03

23. WAS WELL CORED? NO [x] YES [] (Submit analysis) WAS DST RUN? NO [x] YES [] (Submit report) DIRECTIONAL SURVEY? NO [x] YES [] (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

Table with columns: HOLE SIZE, SIZE/GRADE, WEIGHT (#/ft), TOP (MD), BOTTOM (MD), STAGE CEMENTER DEPTH, CEMENT TYPE & NO. OF SACKS, SLURRY VOLUME (BBL), CEMENT TOP **, AMOUNT PULLED. Rows include 12 1/4" 8 5/8' J55 24# 301 and 7 7/8" 5.5" N80 17# 4,157.

25. TUBING RECORD

Table with columns: SIZE, DEPTH SET (MD), PACKER SET (MD). Row: 2.375, 4,015.

26. PRODUCING INTERVALS

27. PERFORATION RECORD

Table with columns: FORMATION NAME, TOP (MD), BOTTOM (MD), TOP (TVD), BOTTOM (TVD), INTERVAL (Top/Bot - MD), SIZE, NO. HOLES, PERFORATION STATUS. Rows include Ferron, (B), (C), (D).

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

Table with columns: DEPTH INTERVAL, AMOUNT AND TYPE OF MATERIAL. Row: 3856-3913, 5381 BBLS, 25# XLG Fluid and 506,920# 16/30 proppant.

29. ENCLOSED ATTACHMENTS: [] ELECTRICAL/MECHANICAL LOGS [] GEOLOGIC REPORT [] DST REPORT [] DIRECTIONAL SURVEY [] SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION [] CORE ANALYSIS [] OTHER:

30. WELL STATUS: PGW

RECEIVED

OCT 22 2003

DIV. OF OIL, GAS & MINING

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 8/13/2003		TEST DATE: 8/13/2003		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 70	WATER - BBL: 0	PROD. METHOD: flowing
CHOKE SIZE:	TBG. PRESS. 25	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 70	WATER - BBL: 0	INTERVAL STATUS:

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED: 8/19/2003		TEST DATE: 8/19/2003		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 0	WATER - BBL: 100	PROD. METHOD: flowing
CHOKE SIZE:	TBG. PRESS. 25	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 0	WATER - BBL: 100	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

SOLD

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Ferron Tununk	3,773 4,032

35. ADDITIONAL REMARKS (Include plugging procedure)

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

NAME (PLEASE PRINT) Kristina A. Lee TITLE Agent for Anadarko - 303-423-5749
 SIGNATURE *Kristina A. Lee* DATE 10/17/2003

This report must be submitted within 30 days of

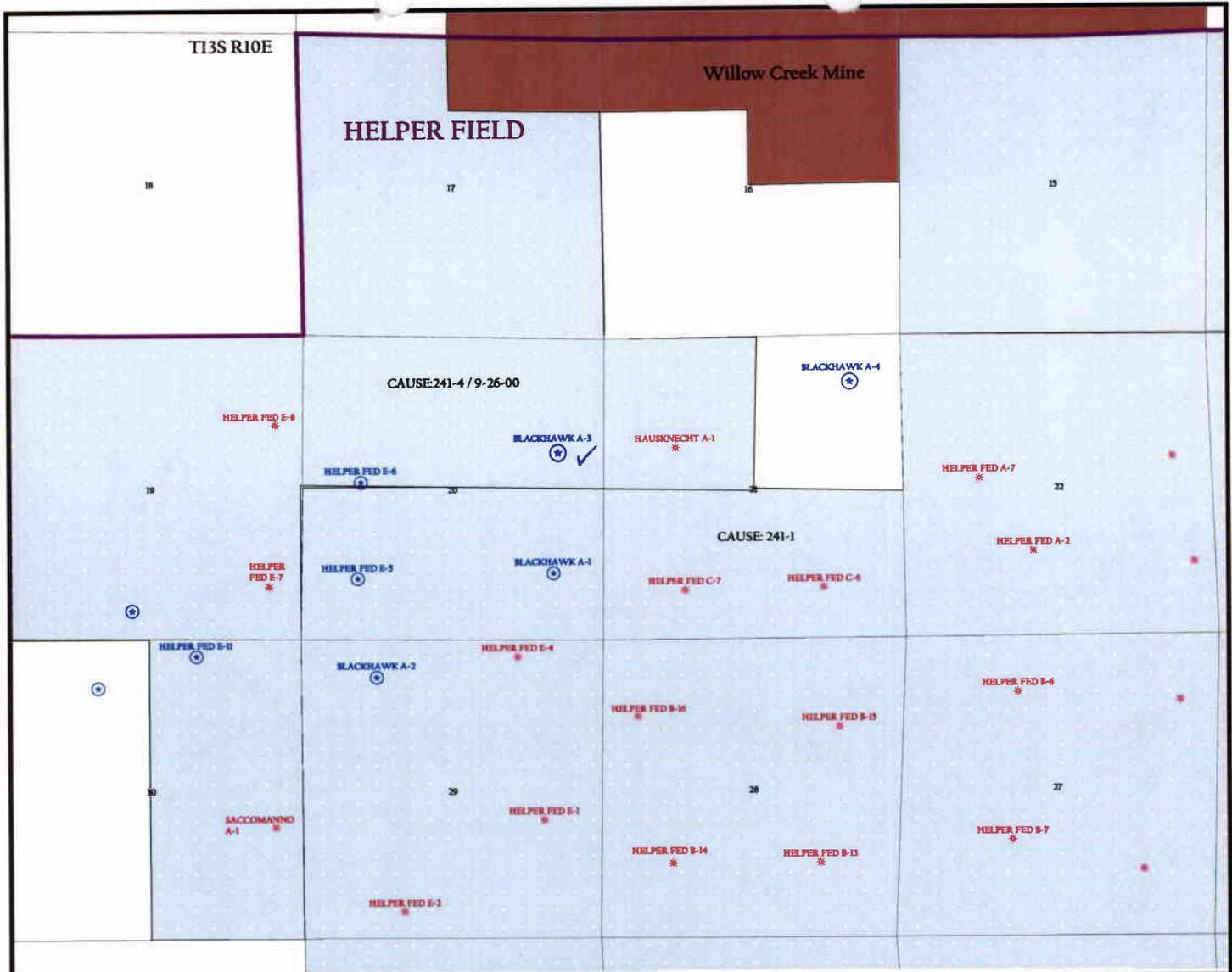
- completing of plugging a new well
- reentering a previously plugged and abandoned well
- drilling horizontal laterals from an existing well bore
- significantly deepening an existing well bore below the previous bottom-hole depth
- recompleting to a different producing formation
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top -- Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
 1594 West North Temple, Suite 1210
 Box 145801
 Salt Lake City, Utah 84114-5801

Phone: 801-538-5340
 Fax: 801-359-3940



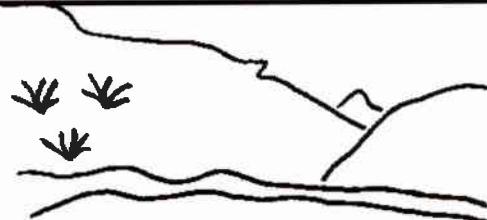
OPERATOR: ANADARKO PETRO CORP (N2115)

SEC. 20 T13S, R10E

FIELD: HELPER (18)

COUNTY: CARBON

CAUSE: 241-4 / 9-26-00



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

UNIT STATUS

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

FIELD STATUS

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED
- COUNTY BOUNDARY
- SECTION LINES
- TOWNSHIP LINES



PREPARED BY: DIANA MASON
DATE: 20-MARCH-2003

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING
 CDW

X - Change of Operator (Well Sold)

Operator Name Change/Merger

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

4/1/2013

FROM: (Old Operator): N0035-Anadarko Petroleum Corporation PO Box 173779 Denver, CO, 80214 Phone: 1 (720) 929-6000	TO: (New Operator): N3940- Anadarko E&P Onshore LLC PO Box 173779 Denver, CO 802014 Phone: 1 (720) 929-6000
---	---

CA No.			Unit:					
WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
See Attached List								

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 4/9/2013
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 4/9/2013
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 4/10/2013
- a. Is the new operator registered in the State of Utah: Business Number: 593715-0161
- 5a. (R649-9-2)Waste Management Plan has been received on: Yes
- 5b. Inspections of LA PA state/fee well sites complete on: 4/10/2013
- 5c. Reports current for Production/Disposition & Sundries on: 4/10/2013
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 4/2/2013 BIA N/A
- Federal and Indian Units:**
 The BLM or BIA has approved the successor of unit operator for wells listed on: N/A
- Federal and Indian Communization Agreements ("CA"):**
 The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 4/10/2013

DATA ENTRY:

- Changes entered in the **Oil and Gas Database** on: 4/11/2013
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 4/11/2013
- Bond information entered in RBDMS on: 4/10/2013
- Fee/State wells attached to bond in RBDMS on: 4/11/2013
- Injection Projects to new operator in RBDMS on: 4/11/2013
- Receipt of Acceptance of Drilling Procedures for APD/New on: N/A

BOND VERIFICATION:

- Federal well(s) covered by Bond Number: WYB000291
- Indian well(s) covered by Bond Number: N/A
- a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 22013542
- b. The **FORMER** operator has requested a release of liability from their bond on: N/A

LEASE INTEREST OWNER NOTIFICATION:

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 4/11/2013

COMMENTS:

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>CBM Wells</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: See Wells
2. NAME OF OPERATOR: Anadarko Petroleum Corporation		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: P.O. Box 173779 CITY <u>Denver</u> STATE <u>CO</u> ZIP <u>80217</u>		7. UNIT or CA AGREEMENT NAME:
PHONE NUMBER: <u>(720) 929-6000</u>		8. WELL NAME and NUMBER:
4. LOCATION OF WELL FOOTAGES AT SURFACE:		9. API NUMBER: See Wells
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT:
		COUNTY: <u> </u>
		STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>4/8/2013</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

The operator is requesting authorization to transfer the wells from Anadarko Petroleum Corporation and Anadarko Production Company to Anadarko E&P Onshore, LLC. Please see the attached list of 181 wells that are currently filed under Anadarko Petroleum Corporation and Anadarko Production Company. The state/fee wells will be under bond number 22013542, and the federal wells will be under bond number WYB000291.

Effective 4/1/13

Please contact the undersigned if there are any questions.

RECEIVED
APR 09 2013

Jaime Scharnowske
Jaime Scharnowske
Regulatory Analyst

Anadarko Petroleum Corporation **N0035**
P.O. Box 173779
Denver, CO 80214
(720) 929-6000

DIV. OF OIL, GAS & MINING
Jaime Scharnowske
Jaime Scharnowske
Regulatory Analyst

Anadarko E&P Onshore, LLC **N3940**
P.O. Box 173779
Denver, CO 80214
(720) 929-6000

NAME (PLEASE PRINT) <u>Jaime Scharnowske</u>	TITLE <u>Regulatory Analyst</u>
SIGNATURE <i>Jaime Scharnowske</i>	DATE <u>4/8/2013</u>

(This space for State use only)
APPROVED
APR 11 2013
DIV. OIL GAS & MINING
Rachel Medina

Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940)
 Effective 1st April-2013

Well Name	Sec	Twncshp	Range	API	Entity No.	Lease Type	Well Type	Well status
HELPER ST SWD 1	03	140S	100E	4300730361	12258	State	WD	A
FED F-2 SWD	08	140S	100E	4300730555	12557	Federal	WD	A
CLAWSON SPRING ST SWD 4	13	160S	080E	4301530477	12979	State	WD	A
CLAWSON SPRING ST SWD 1	36	150S	080E	4300730721	12832	State	WD	I
HELPER FED B-1	33	130S	100E	4300730189	11537	Federal	GW	P
HELPER FED A-1	23	130S	100E	4300730190	11517	Federal	GW	P
HELPER FED A-3	22	130S	100E	4300730213	11700	Federal	GW	P
HELPER FED C-1	22	130S	100E	4300730214	11702	Federal	GW	P
HELPER FED B-5	27	130S	100E	4300730215	11701	Federal	GW	P
HELPER FED A-2	22	130S	100E	4300730216	11699	Federal	GW	P
HELPER FED D-1	26	130S	100E	4300730286	12061	Federal	GW	P
BIRCH A-1	05	140S	100E	4300730348	12120	Fee	GW	P
HELPER ST A-1	03	140S	100E	4300730349	12122	State	GW	P
HELPER ST D-7	04	140S	100E	4300730350	12121	State	GW	P
CHUBBUCK A-1	31	130S	100E	4300730352	12397	Fee	GW	P
VEA A-1	32	130S	100E	4300730353	12381	Fee	GW	P
VEA A-2	32	130S	100E	4300730354	12483	Fee	GW	P
VEA A-3	32	130S	100E	4300730355	12398	Fee	GW	P
VEA A-4	32	130S	100E	4300730356	12482	Fee	GW	P
HELPER ST A-8	02	140S	100E	4300730357	12257	State	GW	P
HELPER ST A-3	02	140S	100E	4300730358	12254	State	GW	P
HELPER ST A-4	02	140S	100E	4300730359	12255	State	GW	P
HELPER ST A-7	02	140S	100E	4300730360	12256	State	GW	P
HELPER ST A-2	03	140S	100E	4300730362	12232	State	GW	P
HELPER ST A-5	03	140S	100E	4300730363	12231	State	GW	P
HELPER ST A-6	03	140S	100E	4300730364	12233	State	GW	P
HELPER ST D-4	04	140S	100E	4300730365	12228	State	GW	P
HELPER ST D-3	05	140S	100E	4300730366	12184	State	GW	P
HELPER ST D-5	04	140S	100E	4300730367	12226	State	GW	P
HELPER ST D-8	04	140S	100E	4300730368	12229	State	GW	P
HELPER ST D-2	05	140S	100E	4300730369	12481	State	GW	P
HELPER ST D-6	05	140S	100E	4300730370	12234	State	GW	P
HELPER ST D-1	06	140S	100E	4300730371	12399	State	GW	P
BIRCH A-2	08	140S	100E	4300730372	12189	Fee	GW	P
HELPER ST A-9	10	140S	100E	4300730373	12230	State	GW	P
HELPER ST B-1	09	140S	100E	4300730376	12227	State	GW	P
HELPER FED F-3	08	140S	100E	4300730378	12252	Federal	GW	P
HELPER FED F-4	09	140S	100E	4300730379	12253	Federal	GW	P
HELPER ST A-10	10	140S	100E	4300730433	12488	State	GW	P
HELPER ST A-11	11	140S	100E	4300730434	12487	State	GW	P
HELPER ST A-12	10	140S	100E	4300730435	12486	State	GW	P
HELPER ST A-13	10	140S	100E	4300730436	12485	State	GW	P
HELPER ST B-2	09	140S	100E	4300730437	12484	State	GW	P
HELPER FED E-7	19	130S	100E	4300730508	13623	Federal	GW	P
HELPER FED B-2	33	130S	100E	4300730530	12619	Federal	GW	P
HELPER FED B-3	33	130S	100E	4300730531	12622	Federal	GW	P
HELPER FED B-4	33	130S	100E	4300730532	12623	Federal	GW	P
HELPER FED B-6	27	130S	100E	4300730533	12644	Federal	GW	P
HELPER FED B-7	27	130S	100E	4300730534	12645	Federal	GW	P
HELPER FED B-8	27	130S	100E	4300730535	12631	Federal	GW	P

Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940)
 Effective 1-April-2013

Well Name	Sec	Twnshp	Range	API	Entity No.	Lease Type	Well Type	Well status
HELPER FED B-9	34	130S	100E	4300730536	12646	Federal	GW	P
HELPER FED B-10	34	130S	100E	4300730537	12626	Federal	GW	P
HELPER FED B-11	34	130S	100E	4300730538	12628	Federal	GW	P
HELPER FED B-12	34	130S	100E	4300730539	12627	Federal	GW	P
HELPER FED B-13	28	130S	100E	4300730540	12621	Federal	GW	P
HELPER FED B-14	28	130S	100E	4300730541	12620	Federal	GW	P
HELPER FED D-2	26	130S	100E	4300730542	12650	Federal	GW	P
HELPER FED D-3	26	130S	100E	4300730543	12634	Federal	GW	P
HELPER FED D-4	35	130S	100E	4300730544	12625	Federal	GW	P
HELPER FED D-5	35	130S	100E	4300730545	12637	Federal	GW	P
HELPER FED D-6	35	130S	100E	4300730546	12635	Federal	GW	P
HELPER FED E-1	29	130S	100E	4300730547	13246	Federal	GW	P
HELPER FED E-2	29	130S	100E	4300730548	12636	Federal	GW	P
HELPER FED H-1	01	140S	100E	4300730549	12653	Federal	GW	P
HELPER FED H-2	01	140S	100E	4300730550	12647	Federal	GW	P
OLIVETO FED A-2	08	140S	100E	4300730556	12630	Federal	GW	P
HELPER FED F-1	08	140S	100E	4300730557	12629	Federal	GW	P
SMITH FED A-1	09	140S	100E	4300730558	13004	Federal	GW	P
SE INVESTMENTS A-1	06	140S	100E	4300730570	12624	Fee	GW	P
HELPER ST A-14	11	140S	100E	4300730571	12612	State	GW	P
HELPER ST A-15	11	140S	100E	4300730572	12613	State	GW	P
HELPER ST E-1	36	130S	100E	4300730573	12615	State	GW	P
HELPER ST E-2	36	130S	100E	4300730574	12614	State	GW	P
HARMOND A-1	07	140S	100E	4300730586	12616	Fee	GW	P
HELPER ST E-3	36	130S	100E	4300730592	12868	State	GW	P
HELPER FED A-6	23	130S	100E	4300730593	12649	Federal	GW	P
HELPER FED D-7	26	130S	100E	4300730594	12651	Federal	GW	P
HELPER FED D-8	35	130S	100E	4300730595	12652	Federal	GW	P
CLAWSON SPRING ST A-1	36	150S	080E	4300730597	12618	State	GW	P
HELPER ST E-4	36	130S	100E	4300730598	12825	State	GW	P
HELPER ST A-16	11	140S	100E	4300730603	12638	State	GW	P
CHUBBUCK A-2	06	140S	100E	4300730604	12648	Fee	GW	P
CLAWSON SPRING ST A-2	36	150S	080E	4300730635	12856	State	GW	P
CLAWSON SPRING ST A-3	36	150S	080E	4300730636	13001	State	GW	P
CLAWSON SPRING ST A-4	36	150S	080E	4300730637	12844	State	GW	P
CLAWSON SPRING ST D-5	31	150S	090E	4300730642	12852	State	GW	P
CLAWSON SPRING ST D-6	31	150S	090E	4300730643	12847	State	GW	P
CLAWSON SPRING ST D-7	31	150S	090E	4300730644	12849	State	GW	P
HELPER FED A-5	23	130S	100E	4300730677	13010	Federal	GW	P
HELPER FED A-7	22	130S	100E	4300730678	13346	Federal	GW	P
HELPER FED B-15	28	130S	100E	4300730679	13015	Federal	GW	P
HELPER FED B-16	28	130S	100E	4300730680	13203	Federal	GW	P
HELPER FED C-2	24	130S	100E	4300730681	13016	Federal	GW	P
HELPER FED C-4	24	130S	100E	4300730682	13012	Federal	GW	P
HELPER FED C-7	21	130S	100E	4300730684	13204	Federal	GW	P
HELPER FED D-9	25	130S	100E	4300730685	13245	Federal	GW	P
HELPER FED D-10	25	130S	100E	4300730686	12993	Federal	GW	P
HELPER FED D-11	25	130S	100E	4300730687	12992	Federal	GW	P
HELPER FED D-12	25	130S	100E	4300730688	13005	Federal	GW	P
HELPER FED E-4	29	130S	100E	4300730689	13229	Federal	GW	P

Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940)
 Effective 1-April-2013

Well Name	Sec	Twنشp	Range	API	Entity No.	Lease Type	Well Type	Well status
HELPER FED A-4	23	130S	100E	4300730692	13009	Federal	GW	P
HELPER FED C-5	24	130S	100E	4300730693	13013	Federal	GW	P
HELPER FED G-1	30	130S	110E	4300730694	13006	Federal	GW	P
HELPER FED G-2	30	130S	110E	4300730695	13007	Federal	GW	P
HELPER FED G-3	31	130S	110E	4300730696	13002	Federal	GW	P
HELPER FED G-4	31	130S	110E	4300730697	13003	Federal	GW	P
HELPER FED H-3	01	140S	100E	4300730698	12831	Federal	GW	P
HELPER FED H-4	01	140S	100E	4300730699	12833	Federal	GW	P
CLAWSON SPRING ST D-8	31	150S	090E	4300730701	12851	State	GW	P
HELPER FED C-3	24	130S	100E	4300730702	13011	Federal	GW	P
CLAWSON SPRING ST J-1	35	150S	080E	4300730726	13299	Fee	GW	P
PIERUCCI 1	35	150S	080E	4300730727	13325	Fee	GW	P
POTTER ETAL 1	35	150S	080E	4300730728	12958	Fee	GW	P
POTTER ETAL 2	35	150S	080E	4300730737	12959	Fee	GW	P
HELPER FED G-5	30	130S	110E	4300730770	13655	Federal	GW	P
HELPER FED G-6	30	130S	110E	4300730771	13656	Federal	GW	P
HELPER FED G-7	31	130S	110E	4300730772	13657	Federal	GW	P
HELPER FED G-8	31	130S	110E	4300730773	13658	Federal	GW	P
GOODALL A-1	06	140S	110E	4300730774	13348	Fee	GW	P
HELPER FED E-8	19	130S	100E	4300730776	13624	Federal	GW	P
HAUSKNECHT A-1	21	130S	100E	4300730781	13347	Fee	GW	P
HELPER FED E-9	19	130S	100E	4300730868	13628	Federal	GW	P
HELPER FED E-5	20	130S	100E	4300730869	13625	Federal	GW	P
HELPER FED E-6	20	130S	100E	4300730870	13631	Federal	GW	P
HELPER FED E-10	30	130S	100E	4300730871	13629	Federal	GW	P
SACCOMANNO A-1	30	130S	100E	4300730872	13622	Fee	GW	P
HELPER FED E-11	30	130S	100E	4300730873	13630	Federal	GW	P
BLACKHAWK A-2	29	130S	100E	4300730886	13783	Fee	GW	P
BLACKHAWK A-3	20	130S	100E	4300730914	13794	Fee	GW	P
BLACKHAWK A-4	21	130S	100E	4300730915	13795	Fee	GW	P
BLACKHAWK A-1X	20	130S	100E	4300730923	13798	Fee	GW	P
HELPER STATE 12-3	03	140S	100E	4300750070	17824	State	GW	P
HELPER STATE 32-3	03	140S	100E	4300750071	17827	State	GW	P
HELPER STATE 32-36	36	130S	100E	4300750072	17825	State	GW	P
VEA 32-32	32	130S	100E	4300750075	17826	Fee	GW	P
CLAWSON SPRING ST E-7	07	160S	090E	4301530392	12960	State	GW	P
CLAWSON SPRING ST E-8	07	160S	090E	4301530394	12964	State	GW	P
CLAWSON SPRING ST E-3	06	160S	090E	4301530403	12965	State	GW	P
CLAWSON SPRING ST E-1	06	160S	090E	4301530404	12966	State	GW	P
CLAWSON SPRING ST E-2	06	160S	090E	4301530405	12961	State	GW	P
CLAWSON SPRING ST E-4	06	160S	090E	4301530406	12962	State	GW	P
CLAWSON SPRING ST C-1	12	160S	080E	4301530410	12617	State	GW	P
CLAWSON SPRING ST B-1	01	160S	080E	4301530427	12845	State	GW	P
CLAWSON SPRING ST B-2	01	160S	080E	4301530428	12846	State	GW	P
CLAWSON SPRING ST B-3	01	160S	080E	4301530429	12848	State	GW	P
CLAWSON SPRING ST B-4	01	160S	080E	4301530430	12854	State	GW	P
CLAWSON SPRING ST B-5	12	160S	080E	4301530431	12963	State	GW	P
CLAWSON SPRING ST B-8	11	160S	080E	4301530432	12863	State	GW	P
CLAWSON SPRING ST B-9	11	160S	080E	4301530433	12864	State	GW	P
CLAWSON SPRING ST C-2	12	160S	080E	4301530434	12850	State	GW	P

Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940)
 Effective 1-April-2013

Well Name	Sec	Twnshp	Range	API	Entity No.	Lease Type	Well Type	Well status
CLAWSON SPRING ST C-4	14	160S	080E	4301530435	13199	State	GW	P
CLAWSON SPRING ST B-7	11	160S	080E	4301530460	12967	State	GW	P
CLAWSON SPRING ST C-6	14	160S	080E	4301530461	13355	State	GW	P
CLAWSON SPRING ST C-3	12	160S	080E	4301530463	12968	State	GW	P
CLAWSON SPRING ST B-6	11	160S	080E	4301530465	12969	State	GW	P
CLAWSON SPRING ST H-1	13	160S	080E	4301530466	13323	State	GW	P
CLAWSON SPRING ST H-2	13	160S	080E	4301530467	12955	State	GW	P
CLAWSON SPRING ST IPA-1	10	160S	080E	4301530468	12956	Fee	GW	P
CLAWSON SPRING ST IPA-2	15	160S	080E	4301530469	13200	Fee	GW	P
CLAWSON SPRING ST E-5	07	160S	090E	4301530470	12971	State	GW	P
CLAWSON SPRING ST G-1	02	160S	080E	4301530471	13014	State	GW	P
CLAWSON SPRING ST F-2	03	160S	080E	4301530472	13282	State	GW	P
CLAWSON SPRING ST F-1	03	160S	080E	4301530473	13278	State	GW	P
CLAWSON SPRING ST E-6	07	160S	090E	4301530474	13052	State	GW	P
CLAWSON SPRING ST G-2	02	160S	080E	4301530475	12957	State	GW	P
CLAWSON SPRING ST M-1	02	160S	080E	4301530488	13201	State	GW	P
CLAWSON SPRING ST K-1	02	160S	080E	4301530489	13202	State	GW	P
SHIMMIN TRUST 3	14	120S	100E	4300730119	11096	Fee	GW	PA
SHIMMIN TRUST 1	11	120S	100E	4300730120	11096	Fee	GW	PA
SHIMMIN TRUST 2	14	120S	100E	4300730121	11096	Fee	GW	PA
SHIMMIN TRUST 4	11	120S	100E	4300730123	11096	Fee	GW	PA
ST 9-16	16	120S	100E	4300730132	11402	State	GW	PA
ST 2-16	16	120S	100E	4300730133	11399	State	GW	PA
MATTS SUMMIT ST A-1	14	120S	090E	4300730141	11273	State	GW	PA
SLEMAKER A-1	05	120S	120E	4300730158	11441	Fee	GW	PA
JENSEN 16-10	10	120S	100E	4300730161	11403	Fee	GW	PA
JENSEN 7-15	15	120S	100E	4300730165	11407	Fee	GW	PA
SHIMMIN TRUST 12-12	12	120S	100E	4300730168	11420	Fee	GW	PA
JENSEN 11-15	15	120S	100E	4300730175	11425	Fee	GW	PA
BRYNER A-1	11	120S	120E	4300730188	11503	Fee	GW	PA
BRYNER A-1X (RIG SKID)	11	120S	120E	4300730209	11503	Fee	GW	PA
BLACKHAWK A-1	20	130S	100E	4300730885	13798	Fee	D	PA
BLACKHAWK A-5H	20	130S	100E	4300731402	17029	Fee	D	PA
CLAWSON SPRING ST SWD 3	06	160S	090E	4301530476	12978	State	D	PA
HELPER FED C-6	21	130S	100E	4300730683	13008	Federal	GW	S
UTAH 10-415	10	160S	080E	4301530391	12632	State	GW	TA

	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
1	4300730189	HELPER FED B-1	NESW	33	13S	10E	Federal	USA UTU 71392	Producing
2	4300730190	HELPER FED A-1	C-SW	23	13S	10E	Federal	USA UTU 58434	Producing
3	4300730213	HELPER FED A-3	SESE	22	13S	10E	Federal	USA UTU 58434	Producing
4	4300730214	HELPER FED C-1	SENE	22	13S	10E	Federal	USA UTU 71391	Producing
5	4300730215	HELPER FED B-5	NENE	27	13S	10E	Federal	USA UTU 71392	Producing
6	4300730216	HELPER FED A-2	NESW	22	13S	10E	Federal	USA UTU 58434	Producing
7	4300730286	HELPER FED D-1	SWNE	26	13S	10E	Federal	USA UTU 68315	Producing
8	4300730378	HELPER FED F-3	NENE	8	14S	10E	Federal	USA UTU 65762	Producing
9	4300730379	HELPER FED F-4	NWNW	9	14S	10E	Federal	USA UTU 65762	Producing
10	4300730508	HELPER FED E-7	SESE	19	13S	10E	Federal	USA UTU 77980	Producing
11	4300730530	HELPER FED B-2	SENE	33	13S	10E	Federal	USA UTU 71392	Producing
12	4300730531	HELPER FED B-3	NESE	33	13S	10E	Federal	USA UTU 71392	Producing
13	4300730532	HELPER FED B-4	NENE	33	13S	10E	Federal	USA UTU 71392	Producing
14	4300730533	HELPER FED B-6	NENW	27	13S	10E	Federal	USA UTU 71392	Producing
15	4300730534	HELPER FED B-7	NESW	27	13S	10E	Federal	USA UTU 71392	Producing
16	4300730535	HELPER FED B-8	SESE	27	13S	10E	Federal	USA UTU 71392	Producing
17	4300730536	HELPER FED B-9	SENE	34	13S	10E	Federal	USA UTU 71392	Producing
18	4300730537	HELPER FED B-10	NWNE	34	13S	10E	Federal	USA UTU 71392	Producing
19	4300730538	HELPER FED B-11	SESW	34	13S	10E	Federal	USA UTU 71392	Producing
20	4300730539	HELPER FED B-12	NESE	34	13S	10E	Federal	USA UTU 71392	Producing
21	4300730540	HELPER FED B-13	SWSE	28	13S	10E	Federal	USA UTU 71392	Producing
22	4300730541	HELPER FED B-14	SWSW	28	13S	10E	Federal	USA UTU 71392	Producing
23	4300730542	HELPER FED D-2	SWNW	26	13S	10E	Federal	USA UTU 68315	Producing
24	4300730543	HELPER FED D-3	SESW	26	13S	10E	Federal	USA UTU 68315	Producing
25	4300730544	HELPER FED D-4	NWNW	35	13S	10E	Federal	USA UTU 68315	Producing
26	4300730545	HELPER FED D-5	SESW	35	13S	10E	Federal	USA UTU 68315	Producing
27	4300730546	HELPER FED D-6	NWSE	35	13S	10E	Federal	USA UTU 68315	Producing
28	4300730547	HELPER FED E-1	NESE	29	13S	10E	Federal	USA UTU 71675	Producing
29	4300730548	HELPER FED E-2	SESW	29	13S	10E	Federal	USA UTU 71675	Producing
30	4300730549	HELPER FED H-1	NENW	1	14S	10E	Federal	USA UTU 72352	Producing
31	4300730550	HELPER FED H-2	SESW	1	14S	10E	Federal	USA UTU 72352	Producing
32	4300730556	OLIVETO FED A-2	NESW	8	14S	10E	Federal	USA UTU 65762	Producing
33	4300730557	HELPER FED F-1	SESE	8	14S	10E	Federal	USA UTU 65762	Producing
34	4300730558	SMITH FED A-1	NWSW	9	14S	10E	Federal	USA UTU 65762	Producing
35	4300730593	HELPER FED A-6	SESE	23	13S	10E	Federal	USA UTU 58434	Producing
36	4300730594	HELPER FED D-7	C-SE	26	13S	10E	Federal	USA UTU 68315	Producing
37	4300730595	HELPER FED D-8	NENE	35	13S	10E	Federal	USA UTU 68315	Producing
38	4300730677	HELPER FED A-5	NENE	23	13S	10E	Federal	USA UTU 58434	Producing
39	4300730678	HELPER FED A-7	SENE	22	13S	10E	Federal	USA UTU 58434	Producing
40	4300730679	HELPER FED B-15	SENE	28	13S	10E	Federal	USA UTU 71392	Producing
41	4300730680	HELPER FED B-16	SWNW	28	13S	10E	Federal	USA UTU 71392	Producing
42	4300730681	HELPER FED C-2	NENW	24	13S	10E	Federal	USA UTU 71391	Producing

API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status	
43	4300730682	HELPER FED C-4	NWSW	24	13S	10E	Federal	USA UTU 71391	Producing
44	4300730683	HELPER FED C-6	SWSE	21	13S	10E	Federal	USA UTU 71391	Shut-In
45	4300730684	HELPER FED C-7	SESW	21	13S	10E	Federal	USA UTU 71391	Producing
46	4300730685	HELPER FED D-9	NWNW	25	13S	10E	Federal	USA UTU 68315	Producing
47	4300730686	HELPER FED D-10	SENE	25	13S	10E	Federal	USA UTU 68315	Producing
48	4300730687	HELPER FED D-11	SESW	25	13S	10E	Federal	USA UTU 68315	Producing
49	4300730688	HELPER FED D-12	SESE	25	13S	10E	Federal	USA UTU 68315	Producing
50	4300730689	HELPER FED E-4	NWNE	29	13S	10E	Federal	USA UTU 71675	Producing
51	4300730692	HELPER FED A-4	SWNW	23	13S	10E	Federal	USA UTU 58434	Producing
52	4300730693	HELPER FED C-5	SWNE	24	13S	10E	Federal	USA UTU 71391	Producing
53	4300730694	HELPER FED G-1	C-NW	30	13S	11E	Federal	USA UTU 71677	Producing
54	4300730695	HELPER FED G-2	SWSW	30	13S	11E	Federal	USA UTU 71677	Producing
55	4300730696	HELPER FED G-3	SENE	31	13S	11E	Federal	USA UTU 71677	Producing
56	4300730697	HELPER FED G-4	SESW	31	13S	11E	Federal	USA UTU 71677	Producing
57	4300730698	HELPER FED H-3	SWNE	1	14S	10E	Federal	USA UTU 72352	Producing
58	4300730699	HELPER FED H-4	NESE	1	14S	10E	Federal	USA UTU 72352	Producing
59	4300730702	HELPER FED C-3	SESW	24	13S	10E	Federal	USA UTU 71391	Producing
60	4300730770	HELPER FED G-5	SWNE	30	13S	11E	Federal	USA UTU 71677	Producing
61	4300730771	HELPER FED G-6	SWSE	30	13S	11E	Federal	USA UTU 71677	Producing
62	4300730772	HELPER FED G-7	NWNE	31	13S	11E	Federal	USA UTU 71677	Producing
63	4300730773	HELPER FED G-8	NESE	31	13S	11E	Federal	USA UTU 71677	Producing
64	4300730776	HELPER FED E-8	SENE	19	13S	10E	Federal	USA UTU 77980	Producing
65	4300730868	HELPER FED E-9	SESW	19	13S	10E	Federal	USA UTU 77980	Producing
66	4300730869	HELPER FED E-5	SWSW	20	13S	10E	Federal	USA UTU 71675	Producing
67	4300730870	HELPER FED E-6	SWNW	20	13S	10E	Federal	USA UTU 71675	Producing
68	4300730871	HELPER FED E-10	NENW	30	13S	10E	Federal	USA UTU 71675	Producing
69	4300730873	HELPER FED E-11	NWNE	30	13S	10E	Federal	USA UTU 71675	Producing
70	4300730119	SHIMMIN TRUST 3	SENE	14	12S	10E	Fee (Private)		Plugged and Abandoned
71	4300730120	SHIMMIN TRUST 1	SESE	11	12S	10E	Fee (Private)		Plugged and Abandoned
72	4300730121	SHIMMIN TRUST 2	SENE	14	12S	10E	Fee (Private)		Plugged and Abandoned
73	4300730123	SHIMMIN TRUST 4	SESW	11	12S	10E	Fee (Private)		Plugged and Abandoned
74	4300730158	SLEMAKER A-1	SWNE	5	12S	12E	Fee (Private)		Plugged and Abandoned
75	4300730161	JENSEN 16-10	SESE	10	12S	10E	Fee (Private)		Plugged and Abandoned
76	4300730165	JENSEN 7-15	SWNE	15	12S	10E	Fee (Private)		Plugged and Abandoned
77	4300730168	SHIMMIN TRUST 12-12	NWSW	12	12S	10E	Fee (Private)		Plugged and Abandoned
78	4300730175	JENSEN 11-15	NESW	15	12S	10E	Fee (Private)		Plugged and Abandoned
79	4300730188	BRYNER A-1	NESE	11	12S	12E	Fee (Private)		Plugged and Abandoned
80	4300730209	BRYNER A-1X (RIG SKID)	NESE	11	12S	12E	Fee (Private)		Plugged and Abandoned
81	4300730348	BIRCH A-1	NWSW	5	14S	10E	Fee (Private)		Producing
82	4300730352	CHUBBUCK A-1	NESE	31	13S	10E	Fee (Private)		Producing
83	4300730353	VEA A-1	SWNW	32	13S	10E	Fee (Private)		Producing
84	4300730354	VEA A-2	NENE	32	13S	10E	Fee (Private)		Producing

	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
85	4300730355	VEA A-3	SESW	32	13S	10E	Fee (Private)		Producing
86	4300730356	VEA A-4	NWSE	32	13S	10E	Fee (Private)		Producing
87	4300730372	BIRCH A-2	NWNW	8	14S	10E	Fee (Private)		Producing
88	4300730570	SE INVESTMENTS A-1	NESE	6	14S	10E	Fee (Private)		Producing
89	4300730586	HARMOND A-1	SENE	7	14S	10E	Fee (Private)		Producing
90	4300730604	CHUBBUCK A-2	SESW	6	14S	10E	Fee (Private)		Producing
91	4300730726	CLAWSON SPRING ST J-1	SESW	35	15S	8E	Fee (Private)		Producing
92	4300730727	PIERUCCI 1	SESW	35	15S	8E	Fee (Private)		Producing
93	4300730728	POTTER ETAL 1	SWNE	35	15S	8E	Fee (Private)		Producing
94	4300730737	POTTER ETAL 2	NESE	35	15S	8E	Fee (Private)		Producing
95	4300730774	GOODALL A-1	NWSW	6	14S	11E	Fee (Private)		Producing
96	4300730781	HAUSKNECHT A-1	SWNW	21	13S	10E	Fee (Private)		Producing
97	4300730872	SACCOMANNO A-1	NESE	30	13S	10E	Fee (Private)		Producing
98	4300730885	BLACKHAWK A-1	SESE	20	13S	10E	Fee (Private)		Plugged and Abandoned
99	4300730886	BLACKHAWK A-2	NWNW	29	13S	10E	Fee (Private)		Producing
100	4300730914	BLACKHAWK A-3	SENE	20	13S	10E	Fee (Private)		Producing
101	4300730915	BLACKHAWK A-4	NENE	21	13S	10E	Fee (Private)		Producing
102	4300730923	BLACKHAWK A-1X	SESE	20	13S	10E	Fee (Private)		Producing
103	4300731402	BLACKHAWK A-5H	NENE	20	13S	10E	Fee (Private)		Plugged and Abandoned
104	4300750075	VEA 32-32	SWNE	32	13S	10E	Fee (Private)		Producing
105	4301530468	CLAWSON SPRING ST IPA-1	SESE	10	16S	8E	Fee (Private)		Producing
106	4301530469	CLAWSON SPRING ST IPA-2	NENE	15	16S	8E	Fee (Private)		Producing
107	4300730132	ST 9-16	NESE	16	12S	10E	State	ML-44443	Plugged and Abandoned
108	4300730133	ST 2-16	NWNE	16	12S	10E	State	ML-44443	Plugged and Abandoned
109	4300730141	MATTS SUMMIT ST A-1	NWNW	14	12S	9E	State	ML-44496	Plugged and Abandoned
110	4300730349	HELPER ST A-1	SESW	3	14S	10E	State	ST UT ML 45805	Producing
111	4300730350	HELPER ST D-7	NWSW	4	14S	10E	State	ST UT ML 45804	Producing
112	4300730357	HELPER ST A-8	NWSE	2	14S	10E	State	ST UT ML 45805	Producing
113	4300730358	HELPER ST A-3	NWNW	2	14S	10E	State	ST UT ML 45805	Producing
114	4300730359	HELPER ST A-4	NWNE	2	14S	10E	State	ST UT ML 45805	Producing
115	4300730360	HELPER ST A-7	NESW	2	14S	10E	State	ST UT ML 45805	Producing
116	4300730362	HELPER ST A-2	NENE	3	14S	10E	State	ST UT ML 45805	Producing
117	4300730363	HELPER ST A-5	NESW	3	14S	10E	State	ST UT ML 45805	Producing
118	4300730364	HELPER ST A-6	NESE	3	14S	10E	State	ST UT ML 45805	Producing
119	4300730365	HELPER ST D-4	SWNW	4	14S	10E	State	ST UT ML 45804	Producing
120	4300730366	HELPER ST D-3	NENE	5	14S	10E	State	ST UT ML 45804	Producing
121	4300730367	HELPER ST D-5	NWNE	4	14S	10E	State	ST UT ML 45804	Producing
122	4300730368	HELPER ST D-8	SESE	4	14S	10E	State	ST UT ML 45804	Producing
123	4300730369	HELPER ST D-2	NENW	5	14S	10E	State	ST UT ML 45804	Producing
124	4300730370	HELPER ST D-6	SESE	5	14S	10E	State	ST UT ML 45804	Producing
125	4300730371	HELPER ST D-1	NENE	6	14S	10E	State	ST UT ML 45804	Producing
126	4300730373	HELPER ST A-9	SESW	10	14S	10E	State	ST UT ML 45805	Producing

	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
127	4300730376	HELPER ST B-1	SWNE	9	14S	10E	State	ST UT ML 47556	Producing
128	4300730433	HELPER ST A-10	NWNE	10	14S	10E	State	ST UT ML 45805	Producing
129	4300730434	HELPER ST A-11	SWNW	11	14S	10E	State	ST UT ML 45805	Producing
130	4300730435	HELPER ST A-12	NWSW	10	14S	10E	State	ST UT ML 45805	Producing
131	4300730436	HELPER ST A-13	NESE	10	14S	10E	State	ST UT ML 45805	Producing
132	4300730437	HELPER ST B-2	NESE	9	14S	10E	State	ST UT ML 47556	Producing
133	4300730571	HELPER ST A-14	SESW	11	14S	10E	State	ST UT ML 45805	Producing
134	4300730572	HELPER ST A-15	SENE	11	14S	10E	State	ST UT ML 45805	Producing
135	4300730573	HELPER ST E-1	SESW	36	13S	10E	State	ST UT ML 45802	Producing
136	4300730574	HELPER ST E-2	SWNW	36	13S	10E	State	ST UT ML 45802	Producing
137	4300730592	HELPER ST E-3	NENE	36	13S	10E	State	ST UT ML 45802	Producing
138	4300730597	CLAWSON SPRING ST A-1	SWSE	36	15S	8E	State	ST UT ML 46106	Producing
139	4300730598	HELPER ST E-4	SWSE	36	13S	10E	State	ST UT ML 45802	Producing
140	4300730603	HELPER ST A-16	SWSE	11	14S	10E	State	ST UT ML 45805	Producing
141	4300730635	CLAWSON SPRING ST A-2	NWNW	36	15S	8E	State	ST UT ML 46106	Producing
142	4300730636	CLAWSON SPRING ST A-3	NESW	36	15S	8E	State	ST UT ML 46106	Producing
143	4300730637	CLAWSON SPRING ST A-4	NWNE	36	15S	8E	State	ST UT ML 46106	Producing
144	4300730642	CLAWSON SPRING ST D-5	NENW	31	15S	9E	State	ML-48226	Producing
145	4300730643	CLAWSON SPRING ST D-6	SWSW	31	15S	9E	State	ML-48226	Producing
146	4300730644	CLAWSON SPRING ST D-7	NWNE	31	15S	9E	State	ML-48226	Producing
147	4300730701	CLAWSON SPRING ST D-8	NWSE	31	15S	9E	State	ML-48226	Producing
148	4300750070	HELPER STATE 12-3	SWNW	3	14S	10E	State	ST UT ML 45805	Producing
149	4300750071	HELPER STATE 32-3	SWNE	3	14S	10E	State	ST UT ML 45805	Producing
150	4300750072	HELPER STATE 32-36	SWNE	36	13S	10E	State	ST UT ML 45802	Producing
151	4301530391	UTAH 10-415	NENE	10	16S	8E	State	ST UT ML 48189	Temporarily-Abandoned
152	4301530392	CLAWSON SPRING ST E-7	SENE	7	16S	9E	State	ST UT ML 48220-A	Producing
153	4301530394	CLAWSON SPRING ST E-8	SWSE	7	16S	9E	State	ST UT ML 48220-A	Producing
154	4301530403	CLAWSON SPRING ST E-3	SENE	6	16S	9E	State	ST UT ML 48220-A	Producing
155	4301530404	CLAWSON SPRING ST E-1	SENE	6	16S	9E	State	ST UT ML 48220-A	Producing
156	4301530405	CLAWSON SPRING ST E-2	NESW	6	16S	9E	State	ST UT ML 48220-A	Producing
157	4301530406	CLAWSON SPRING ST E-4	NWSE	6	16S	9E	State	ST UT ML 48220-A	Producing
158	4301530410	CLAWSON SPRING ST C-1	SWNW	12	16S	8E	State	ST UT UO 48209	Producing
159	4301530427	CLAWSON SPRING ST B-1	NENW	1	16S	8E	State	ST UT ML 48216	Producing
160	4301530428	CLAWSON SPRING ST B-2	NWSW	1	16S	8E	State	ST UT ML 48216	Producing
161	4301530429	CLAWSON SPRING ST B-3	NWNE	1	16S	8E	State	ST UT ML 48216	Producing
162	4301530430	CLAWSON SPRING ST B-4	SESE	1	16S	8E	State	ST UT ML 48216	Producing
163	4301530431	CLAWSON SPRING ST B-5	SWSW	12	16S	8E	State	ST UT ML 48216	Producing
164	4301530432	CLAWSON SPRING ST B-8	SENE	11	16S	8E	State	ST UT ML 48216	Producing
165	4301530433	CLAWSON SPRING ST B-9	NWSE	11	16S	8E	State	ST UT ML 48216	Producing
166	4301530434	CLAWSON SPRING ST C-2	SENE	12	16S	8E	State	ST UT UO 48209	Producing
167	4301530435	CLAWSON SPRING ST C-4	SWNW	14	16S	8E	State	ST UT UO 48209	Producing
168	4301530460	CLAWSON SPRING ST B-7	NWSW	11	16S	8E	State	ST UT ML 48216	Producing

	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
169	4301530461	CLAWSON SPRING ST C-6	SENE	14	16S	8E	State	ST UT UO 48209	Producing
170	4301530463	CLAWSON SPRING ST C-3	C-SE	12	16S	8E	State	ST UT UO 48209	Producing
171	4301530465	CLAWSON SPRING ST B-6	NENW	11	16S	8E	State	ST UT ML 48216	Producing
172	4301530466	CLAWSON SPRING ST H-1	NENW	13	16S	8E	State	ST UT ML 48217-A	Producing
173	4301530467	CLAWSON SPRING ST H-2	NENE	13	16S	8E	State	ST UT ML 48217-A	Producing
174	4301530470	CLAWSON SPRING ST E-5	NENW	7	16S	9E	State	ST UT ML 48220-A	Producing
175	4301530471	CLAWSON SPRING ST G-1	NWNW	2	16S	8E	State	ST UT ML 46314	Producing
176	4301530472	CLAWSON SPRING ST F-2	NESE	3	16S	8E	State	ST UT ML 48515	Producing
177	4301530473	CLAWSON SPRING ST F-1	SENE	3	16S	8E	State	ST UT ML 48514	Producing
178	4301530474	CLAWSON SPRING ST E-6	SESW	7	16S	9E	State	ST UT ML 48220-A	Producing
179	4301530475	CLAWSON SPRING ST G-2	NESW	2	16S	8E	State	ST UT ML 46314	Producing
180	4301530488	CLAWSON SPRING ST M-1	NWNE	2	16S	8E	State	ST UT ML 47561	Producing
181	4301530489	CLAWSON SPRING ST K-1	SESE	2	16S	8E	State	ST UT ML 46043	Producing