

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE*
(Other instructions on
reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
 DRILL DEEPEN

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

2. NAME OF OPERATOR
 Arch W. Deuel

3. ADDRESS AND TELEPHONE NO.
 P.O. Box 1606 Casper, WY 82604

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface SESE, 850' FSL, 850' FEL
 At proposed prod. zone Same

5. LEASE DESIGNATION AND SERIAL NO.
 U-55509

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

7. UNIT AGREEMENT NAME
 N/A

8. FARM OR LEASE NAME, WELL NO.
 DEUEL FED #1

9. AN WELL NO.

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec. 29, T21S-R20E

12. COUNTY OR PARISH
 Grand

13. STATE
 Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 1 1/2 Miles south of Thompson, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 850'

16. NO. OF ACRES IN LEASE
 6,717.78

17. NO. OF ACRES ASSIGNED TO THIS WELL
 40

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

19. PROPOSED DEPTH
 1,200'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5128 GR

22. APPROX. DATE WORK WILL START*
 November 30, 1994

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
SEE DRILLING	PLAN			

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Arch W. Deuel TITLE Owner DATE 10/22/94

(This space for Federal or State office use)

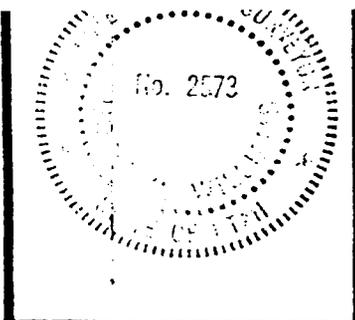
PERMIT NO. 43-019-31355 APPROVAL DATE APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would enable the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY _____ TITLE _____ DATE _____ BY: _____ DATE _____

*See Instructions On Reverse Side WELL SPACING: _____ Page 1



SURVEYOR'S CERTIFICATE

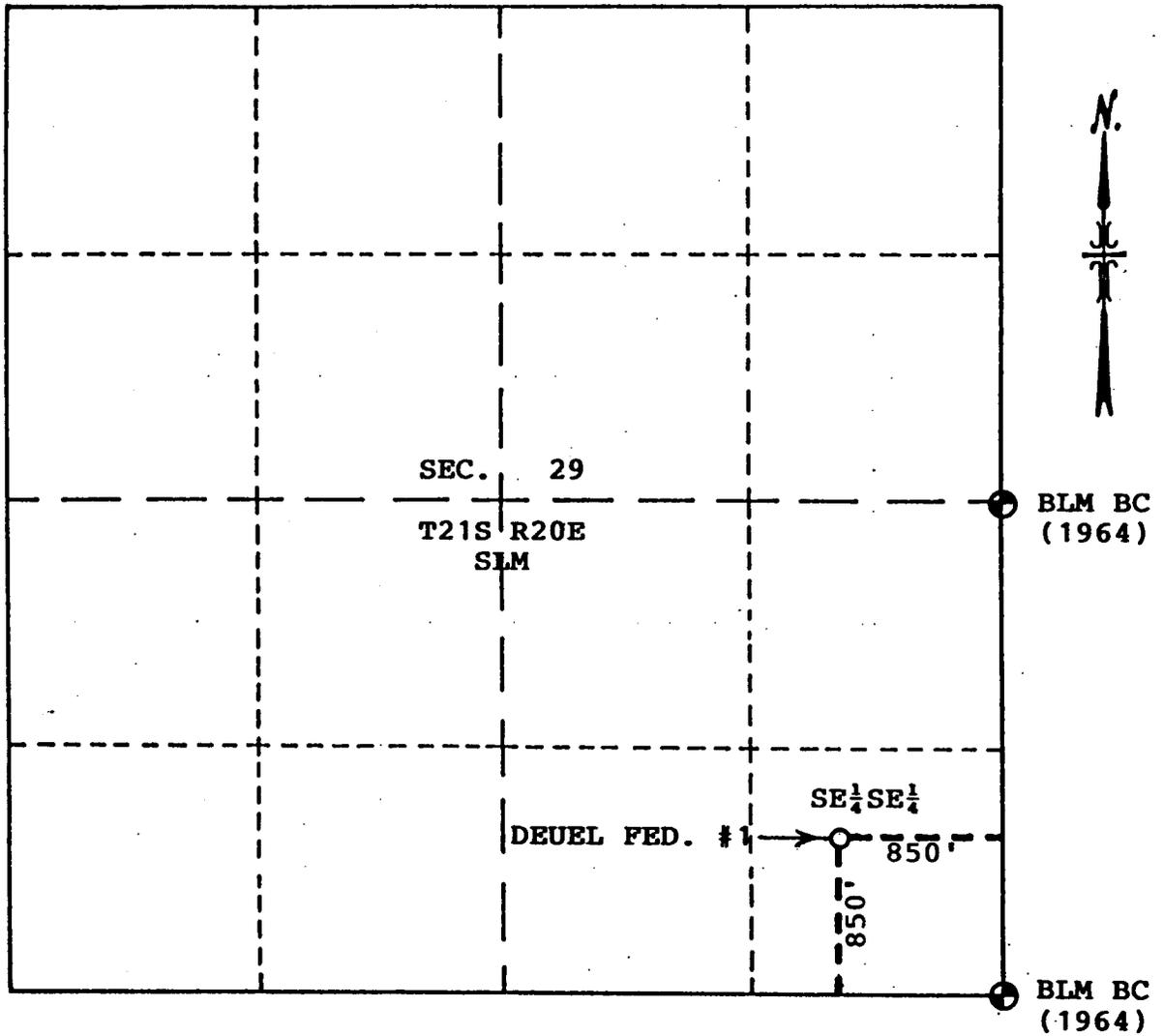
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

[Signature]
Utah RLS No. 2573

751 Road Avenue (303) 243-4594
Grand Junction, Colorado 81501

PLAT OF PROPOSED LOCATION
DEUEL FED. #1
SE 1/4 SE 1/4 SECTION 29
T21S, R20E, SLM

SURVEYED BY: USW DATE: 10/18/94
 DRAWN BY: USW DATE: 10/19/94

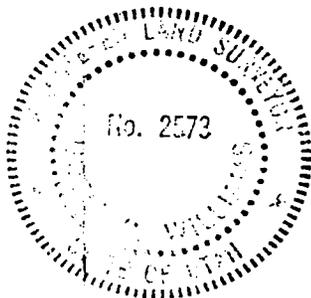


DEUEL FED. #1

Located 850 feet from the South line and 850 feet from the East line of Section 29, T21S, R20E, SLM.

Elev. 5128

Grand County, Utah



SURVEYOR'S 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

Udell S. Williams
Utah RLS No. 2573



UDELL S. WILLIAMS
Professional Land Surveyor
751 Rood Avenue (303) 243-4594
Grand Junction, Colorado 81501

**PLAT OF
PROPOSED LOCATION**

**DEUEL FED. #1
SE 1/4 SE 1/4 SECTION 29
T21S, R20E, SLM**

SURVEYED BY: USW DATE: 10/18/94

DRAWN BY: USW DATE: 10/19/94

**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 10/30/94

API NO. ASSIGNED: 43-019-31355

WELL NAME: DEUEL FEDERAL #1
 OPERATOR: ARMA GEOPHYSICAL CO. INC (N0315)

PROPOSED LOCATION:
 SESE 29 - T21S - R20E
 SURFACE: 0850-FSL-0850-FEL
 BOTTOM: 0850-FSL-0850-FEL
 GRAND COUNTY
 WILDCAT FIELD (001)

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

LEASE TYPE: FED
 LEASE NUMBER: U-55509

PROPOSED PRODUCING FORMATION: FRSD

RECEIVED AND/OR REVIEWED:

Y Plat
N Bond: Federal [State[] Fee[]
 (Number UT 1004)
N Potash (Y/N)
N Oil shale (Y/N)
Y Water permit
 (Number CITY OF THOMSON)
Y RDCC Review (Y/N)
 (Date: 2/11/94)

LOCATION AND SITING:

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

COMMENTS: _____

STIPULATIONS: _____

**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 10/30/94

API NO. ASSIGNED: 43-019-31355

WELL NAME: DEUEL FEDERAL #1
 OPERATOR: ~~ARCH W. DEUEL (N0200)~~ (N0315)
Arma Geophysical Co., Inc

PROPOSED LOCATION:
 SESE 29 - T21S - R20E
 SURFACE: 0850-FSL-0850-FEL
 BOTTOM: 0850-FSL-0850-FEL
 GRAND COUNTY
 WILDCAT FIELD (001)

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

LEASE TYPE: FED
 LEASE NUMBER: U-55509

PROPOSED PRODUCING FORMATION: FRSD

RECEIVED AND/OR REVIEWED:

Plat
 Bond: Federal State Fee
 (Number UT 1004)
 Potash (Y/N)
 Oil shale (Y/N)
 Water permit
 (Number CITY OF THOMPSON)
 RDCC Review (Y/N)
 (Date: 2/21/94)

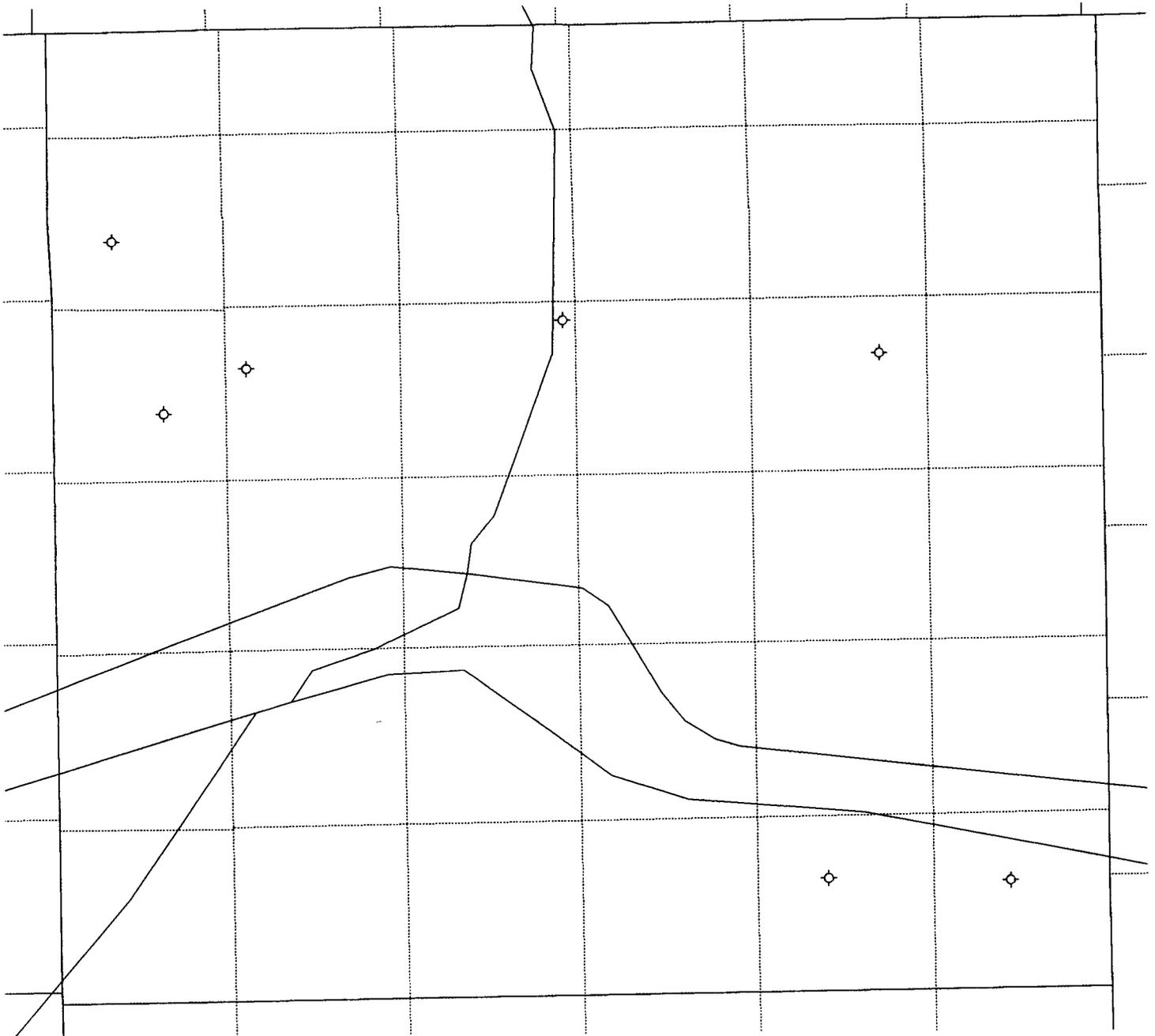
LOCATION AND SITING:

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

COMMENTS: _____

STIPULATIONS: _____

ARCH DEUEL
DEUEL FEDERAL #1
SEC. 29, T 21 S, R 20 E
GRAND COUNTY UTAH
NO SPACING NO FIELD



STATE ACTIONS

Mail to:
RDCC Coordinator
116 State Capitol
Salt Lake City, Utah 84114

1. ADMINISTERING STATE AGENCY
OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

2. STATE APPLICATION IDENTIFIER NUMBER:
(assigned by State Clearinghouse)

3. APPROXIMATE DATE PROJECT WILL START:
November 30, 1994

4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:
(to be sent out by agency in block 1)
Southeastern Utah Association of Local Governments Drawer A-1 Price Utah 84501. Attn: Bill Howell

5. TYPE OF ACTION: Lease Permit License Land Acquisition
 Land Sale Land Exchange Other _____

6. TITLE OF PROPOSED ACTION:
Application for Permit to Drill

7. Arch W. Deuel proposes to drill the Deuel Federal #1 well (wildcat) on federal lease U-55509 in Grand County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The U.S. Bureau of Land Management is the primary administrative agency in this action and must issue approval before operations commence.

8. LAND AFFECTED (site location map required) (indicate county)
SE, SE, Section 29, Township 21 South, Range 20 East, Grand County, Utah

9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?

10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:
See Attachment

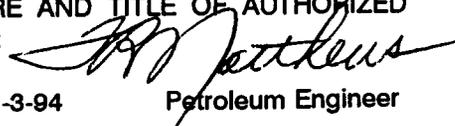
11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:

12. FOR FURTHER INFORMATION, CONTACT:

Frank R. Matthews
PHONE: 538-5340

13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL:

DATE: 11-3-94


Petroleum Engineer

WOI187



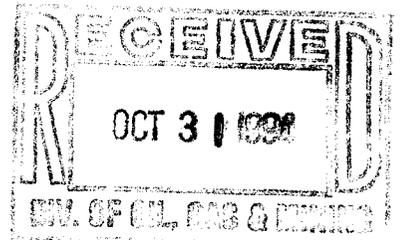
ARCH W. DEUEL
Independent — Oil

PETROLEUM BUILDING • SUITE 203 • P.O. Box 1606 • CASPER, WYOMING 82602 • (307) 237-9337 • (307) 234-3168

October 27, 1994

Re: Application For Permit to Drill
#1 Deuel-Federal
SE SE Section 29
T. 21 S., R. 20 E.
Grand County
U T A H

State of Utah
Division of Oil, Gas & Mining
3 Triad Center - Suite 350
Salt Lake City, Utah 84180-1203



Ladies & Gentlemen:

Enclosed is a copy of the APD as captioned above, which has been filed with the Moab District Office of the Bureau of Land Management.

Evidence of bonding, Designation of Operator and federal permit number will be supplied by Sundry Notice.

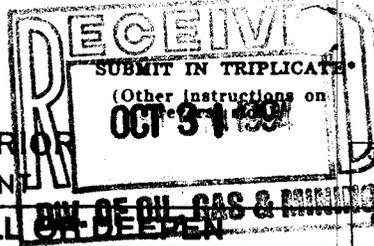
Very truly yours,

ARCH W. DEUEL

Dana H. Deuel

DHD:mjp
Enclosure

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

LEASE DESIGNATION AND SERIAL NO.
U-55509
IF INDIAN, ALLOTTEE OR TRIBE NAME

1a. TYPE OF WORK
DRILL DEEPEN

7. UNIT AGREEMENT NAME
N/A

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

8. FARM OR LEASE NAME WELL NO.
N/A

2. NAME OF OPERATOR
Arch W. Deuel

9. API WELL NO.
DEUEL FED. #1

3. ADDRESS AND TELEPHONE NO.
P.O. Box 1606 Casper, WY 82604

10. FIELD AND POOL, OR WILDCAT
Wildcat

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface
SESE, 850' FSL, 850' FEL
At proposed prod. zone
Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 29, T21S-R20E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
1 1/2 Miles south of Thompson, Utah

12. COUNTY OR PARISH 13. STATE
Grand Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 850'

16. NO. OF ACRES IN LEASE
6,717.78

17. NO. OF ACRES ASSIGNED TO THIS WELL
40

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

19. PROPOSED DEPTH
1,200'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
5128 GR

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November 30, 1994

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SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
SEE DRILLING	PLAN			

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Arch W. Deuel TITLE Owner DATE 10/22/94

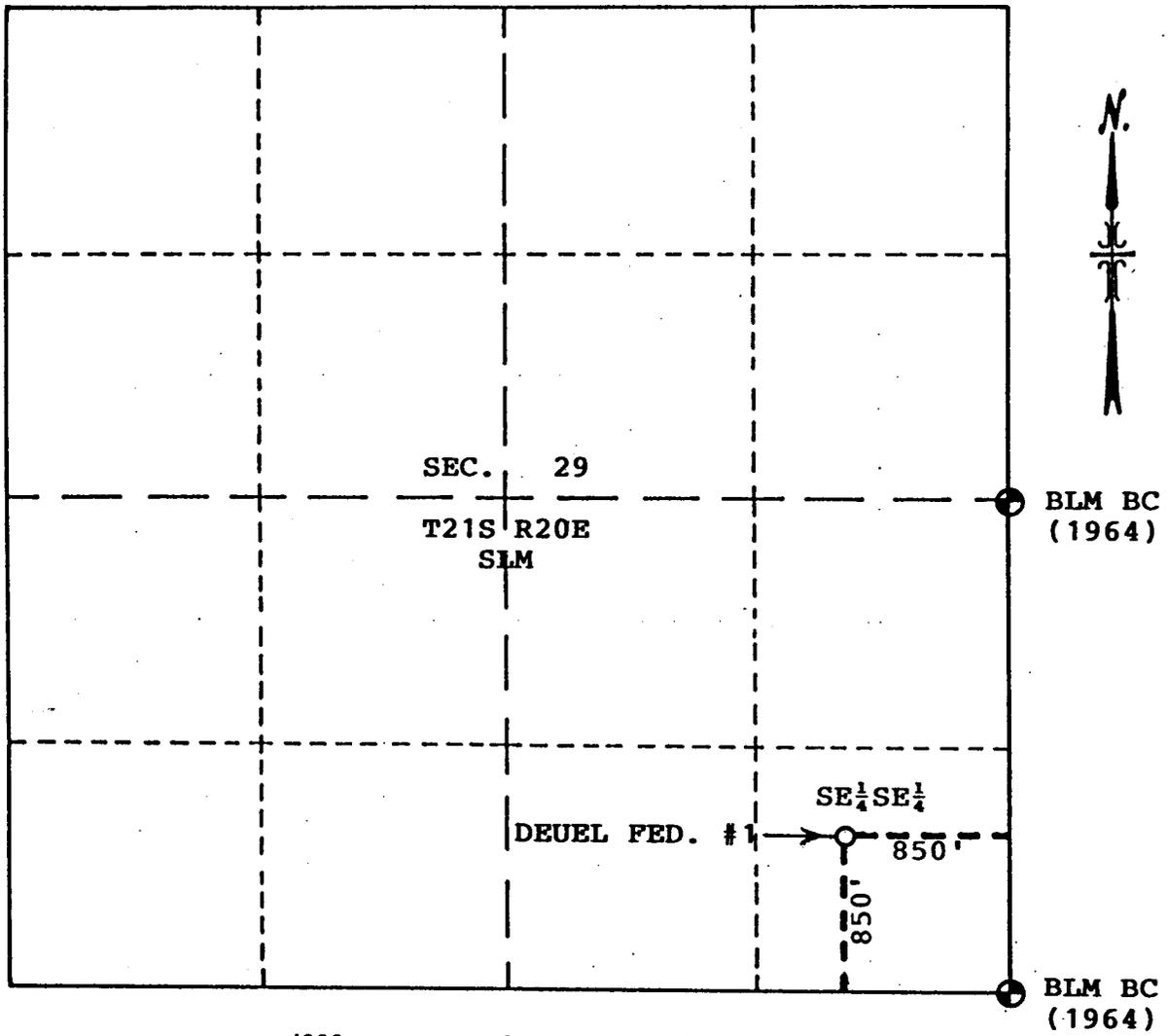
(This space for Federal or State office use)

PERMIT NO. 43-019-31355 APPROVAL DATE APPROVED BY THE STATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would enable the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:
APPROVED BY _____ TITLE _____ DATE: 11/30/94 BY: [Signature]

WELL SPACING: 3649-3-2

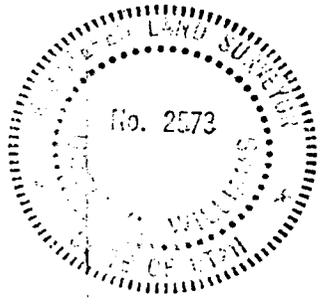


DEUEL FED. #1

Located 850 feet from the South line and 850 feet from the East line of Section 29, T21S, R20E, SLM.

Elev. 5128

Grand County, Utah



SURVEYOR'S 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

Udell S. Williams
Utah RLS No. 2573



UDELL S. WILLIAMS
Professional Land Surveyor
751 Rood Avenue (303) 243-4594
Grand Junction, Colorado 81501

PLAT OF
PROPOSED LOCATION
DEUEL FED. #1
SE $\frac{1}{4}$ SE $\frac{1}{4}$ SECTION 29
T21S, R20E, SLM

SURVEYED BY: USW DATE: 10/18/94
DRAWN BY: USW DATE: 10/19/94

DRILLING PLAN

Arch W. Deuel
No. #1 Deuel Fed.
SESE Section 29-T21S-R20E
Grand County, Utah
Lease No.U-55509

Supplement to Form 3160-3 "Application for Permit to Drill, Deepen, or Plugback"

1. **SURFACE FORMATION**

Mancos Shale

2. **ESTIMATED TOPS**

<u>Formation</u>	<u>Vertical Depth</u>
Mancos Shale	Surface - 1000'
Ferron Sand	1000-1200'
Proposed TD	1200'

3. **ESTIMATED DEPTHS AT WHICH ANTICIPATED WATER, OIL, GAS OR OTHER MINERAL BEARING ZONES ARE EXPECTED TO BE ENCOUNTERED**

Natural gas may be encountered throughout the Mancos section as shows in this area is from fractured portions of the Mancos Shale. Natural gas is expected in the Ferron Sand at a depth of 1000'. No apparent water is observed in offset wells to proposed TD.

4. **CASING PROGRAM**

0'-10', 10" conductor pipe through surface gravels. Will be cemented around the annulus from surface

0' - 200', 5-1/2", 15.5#, K-55 used pipe will be cemented back to surface with clean returns. Class G cement will be used. *Pipe will be made available for BLM inspection at least 24 hours prior to being run.*

5. **PRESSURE CONTROL**

The well will be drilled using a double ram BOP and a rotating head (See Diagram and specifications). Mud pits will be dug along rig and used if necessary.
(See rig layout diagram).

6. **DRILLING FLUIDS**

Well will be drilled with air from surface to Total Depth. Mud pits will be on location at all times for unexpected pressure control.

Arch W. Deuel
No. #1 Deuel Fed.
SESE Section 29-T21S-R20E
Grand County, Utah
Lease No.U-55509

7. **AUXILIARY EQUIPMENT TO BE USED**

The primary air compressor is placed adjacent to the drilling rig. Drill string safety valves will be available on the drilling floor and a float valve will be run above the bit. A mist pump will be used to control dust when necessary. A pilot light will be used on the blooie line.

8. **TESTING, LOGGING AND CORING PROGRAM**

- a. Coring: None
- b. Drill Stem Testing: None
- c. Logging: No logs will be run - evaluation potential nil.

9. **ABNORMAL CONDITIONS AND POTENTIAL HAZARDS**

No abnormal conditions or hazards are expected. Hydrogen sulfide gas is not expected. Expected bottom hole temperature is 80° F.
Bottom hole pressure is estimated to be 100 PSIG or less. (Underpressured)

10. **ANTICIPATED STARTING DATE OF DRILLING OPERATIONS**

Plan to start drilling November 30, 1994. Five to six days should be required to set casing and drill the test.

11. **BLOOIE PIT**

A blooie pit 10'X10'X6' will be constructed 100' from the drilling rig. The blooie line will be securely anchored with steel posts. Steel tanks will be used to store produced fluids, should they be encountered.

12. **RIG**

A rubber tired truck mounted rig will be used and primary air compressors will be adjacent to the rig. See rig layout diagram.

CULTURAL RESOURCE REPORT

No cultural resource report is required for this test as the well will be drilled in a reclaimed Utah Highway Department borrow pit. A letter authorizing the use of the borrow pit is attached .

SURFACE USE PROGRAM

Arch W. Deuel
No. #1 Deuel Fed.
SESE Section 29-T21S-R20E
Grand County, Utah
Lease No.U-55509

1. EXISTING ROADS

- a. Proposed wellsite is shown on Access Route Map.
- b. To visit wellsite, go to Thompson Springs, Utah and take exit off I-70 go south under interstate highway on Grand Co. Road 146, also known as the Thompson - Long Valley Road. The location is 3/4 mile south of the under pass.
- c. The Grand Co. Road Dept. has been contacted for the use of the road. A letter executed by Dave Werner is included with this APD.
- d. There are no plans to improve or maintain the existing road.
- e. The proposed drill site will be at least 33' from the center line of the existing county road and away from the buried power lines.

2. ACCESS ROADS

No access roads will be required as the well will be drilled with a truck mounted rig.

3. LOCATION OF EXISTING WELLS (within a 1 mile radius)

- a. Water wells: None
- b. Abandoned wells: None The closest abandon well to the proposed drill site is in Sec. 35, approximately 2 1/2 miles to the east.
- c. Temporarily abandoned wells: None
- d. Disposal wells: None
- e. Drilling wells: None
- f. Producing wells: None
- g. Shut in wells: None
- h. Injection wells: None
- i. Monitoring or Observation wells for other resources: None

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- a. On site production facilities will consist of a well head and meter.
- b. There are no off site facilities planned.
- c. If the well is gas productive, a pipeline will be constructed to the Mid-America pump station located approximately 500' southwest of the proposed well. Compressors needed will be placed inside the pipeline facility.
- d. All permanent facilities will be painted in non reflective color to match the surrounding soil and rocks.

Arch W. Deuel
No. #1 Deuel Fed.
SESE Section 29-T21S-R20E
Grand County, Utah
Lease No.U-55509

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

- a. This well will be air drilled and will not require water while drilling.
- b. Water will be hauled to the location for safety use and dust control from a private source. The water will be purchased from Thompson Springs water supply
Location of the water supply is shown on the Access Route Map.

6. **SOURCE OF CONSTRUCTION MATERIALS**

- a. Pad construction will be minimal as a rubber tired truck mounted rig will be used and minimal surface damage will be required. Any construction materials will be natural on site materials.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

- a. Cuttings will be disposed of in a 10'^{10'}x6'x6' blooie pit constructed at least 100' northeast of the bore hole. The pit will be dug down and into the embankment on the east side of the pad. See rig layout diagram. The blooie pit and mud pits will be fenced.
- b. Dust will be controlled with water introduced into the blooie line.
- c. No water disposal should be required - if water disposal is required, it will be done in accordance with NTL-2B regulations.
- d. Sewage: Drilling operations will be conducted during day light hours only. No sewage system will be needed.
- e. Garbage and Trash: Garbage barrel will be used and will be hauled to city dump.

8. **ANCILLARY FACILITIES**

None

9. **WELLSITE LAYOUT**

- a. Location of rig, pits and associated equipment is shown in attached rig layout plan.
- b. Access to the well pad will be from County road 146.
- c. Blooie pit will be at least 100' from the well head.
- d. The end of the blooie line will be angled downward to divert cuttings and dust into pit. Material removed in construction of the pit will be stock piled on the uphill portion of the pit. Water will be injected into blooie line to minimize dust.

Arch W. Deuel
No. #1 Deuel Fed.
SESE Section 29-T21S-R20E
Grand County, Utah
Lease No.U-55509

10. **SURFACE RECLAMATION PLAN**

- a. Any top soil removed in pad construction will stockpiled separately as shown in Rig Layout Diagram. All temporary disturbances will be restored to their original contour.
- b. **Well Abandonment:** The disturbed areas will be re-contoured to the original topography. No unnatural depressions will be left that may collect water. The stockpiled topsoil will be distributed evenly over the area.
- c. **Producing Well:** Those areas not needed for production purposes will be re-contoured to the surrounding topography. Topsoil will be evenly distributed over areas not needed for production. These areas will be seeded per BLM specifications.
- d. **Pipelines and Flowlines** needed for producing well will be removed upon abandonment.
- e. **Rehabilitation** will begin between November 1 and February 28.
- f. The disturbed area will be seeded with 5 lbs. of crested wheat grass.
- g. Abandonment marker will be to BLM specifications and be inscribed with appropriate information.

11. **SURFACE and MINERAL OWNERSHIP**

The location and proposed access are on lands owned by:

Bureau of Land Management
P.O. Box 970
125 West 2nd South
Moab, Utah
84532

12. **OTHER INFORMATION**

- a. There are no archeological concerns associated with the proposed location. The proposed drill site is in a previously disturbed and reclaimed Utah Highway Dept. borrow pit.
- b. Threatened or Endangered Species Concerns: None
- c. Wildlife Seasonal Restrictions: None
- d. Off Location Geophysical Testing: None
- e. Drainage crossings that require additional State or Federal approval: None

Arch W. Deuel
No. #1 Deuel Fed.
SESE Section 29-T21S-R20E
Grand County, Utah
Lease No.U-55509

13. LESSEE OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION

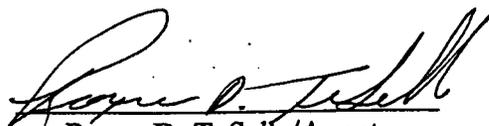
Arch W. Deuel
P.O. Box 1606
Casper, WY 82602
(307) 237-9337

or

Roger TeSelle
1557 N. Mill Creek Rd.
Casper, WY 82604
(307) 472-3211

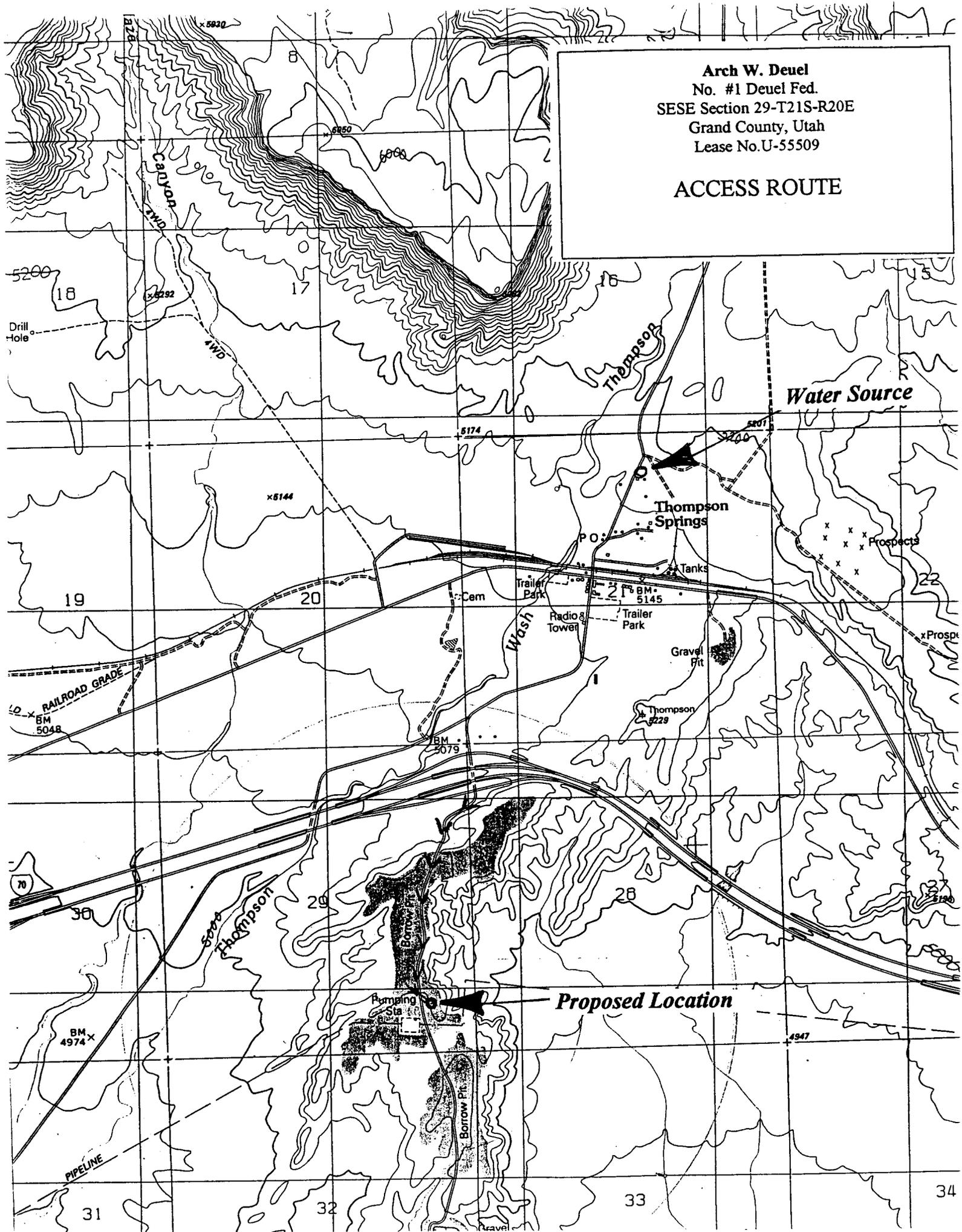
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist, that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated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

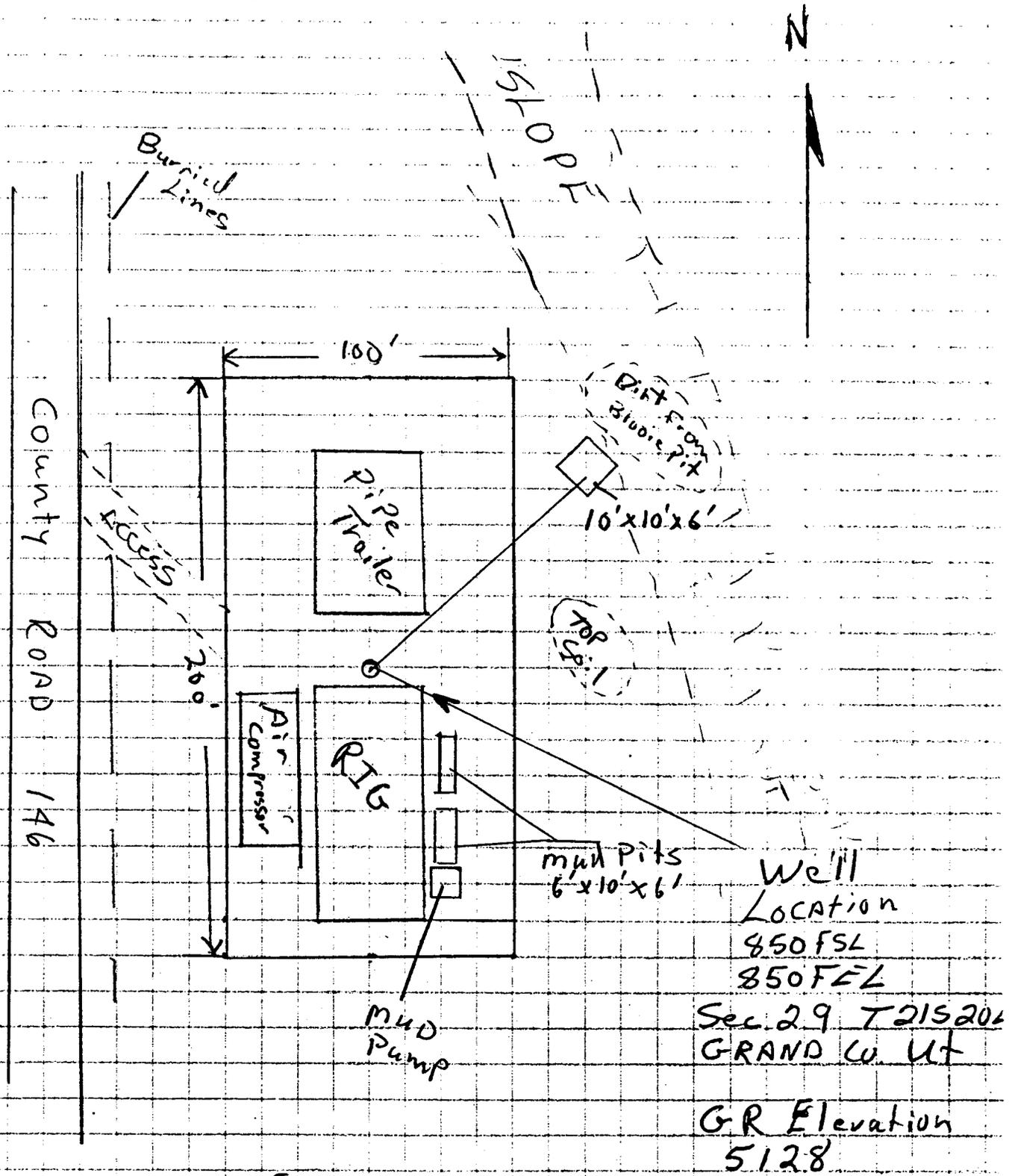
October 17, 1994
Date


Roger D. TeSelle/Agent

Arch W. Deuel
No. #1 Deuel Fed.
SESE Section 29-T21S-R20E
Grand County, Utah
Lease No. U-55509

ACCESS ROUTE





SCALE
1" = 50'

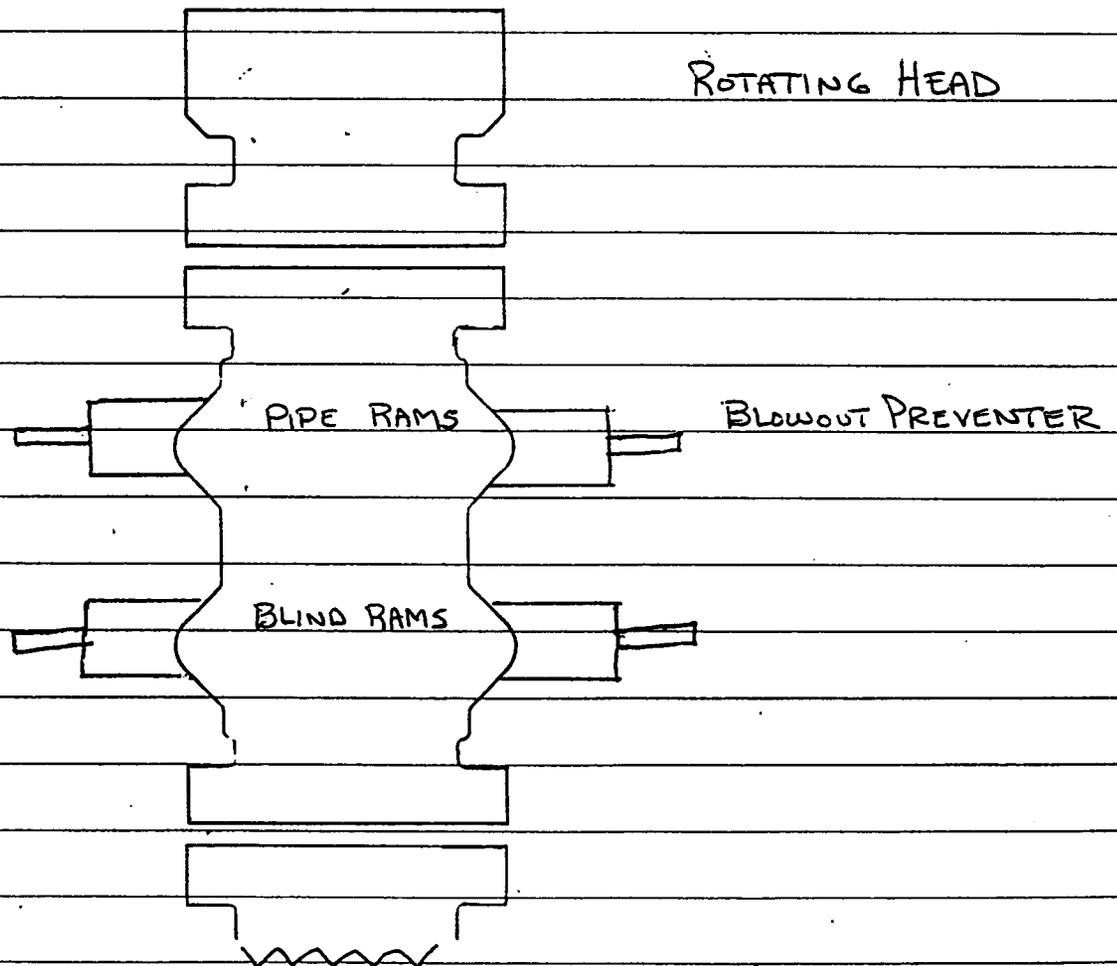
Arch W. Deuel
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RIG LAYOUT
 DIAGRAM

Arch W. Deuel
No. #1 Deuel Fed.
SESE Section 29-T21S-R20E
Grand County, Utah
Lease No. U-55509

PRESSURE CONTROL
DIAGRAM

7'11/16 3000 #



GRANT R

Rotating Drilling Heads

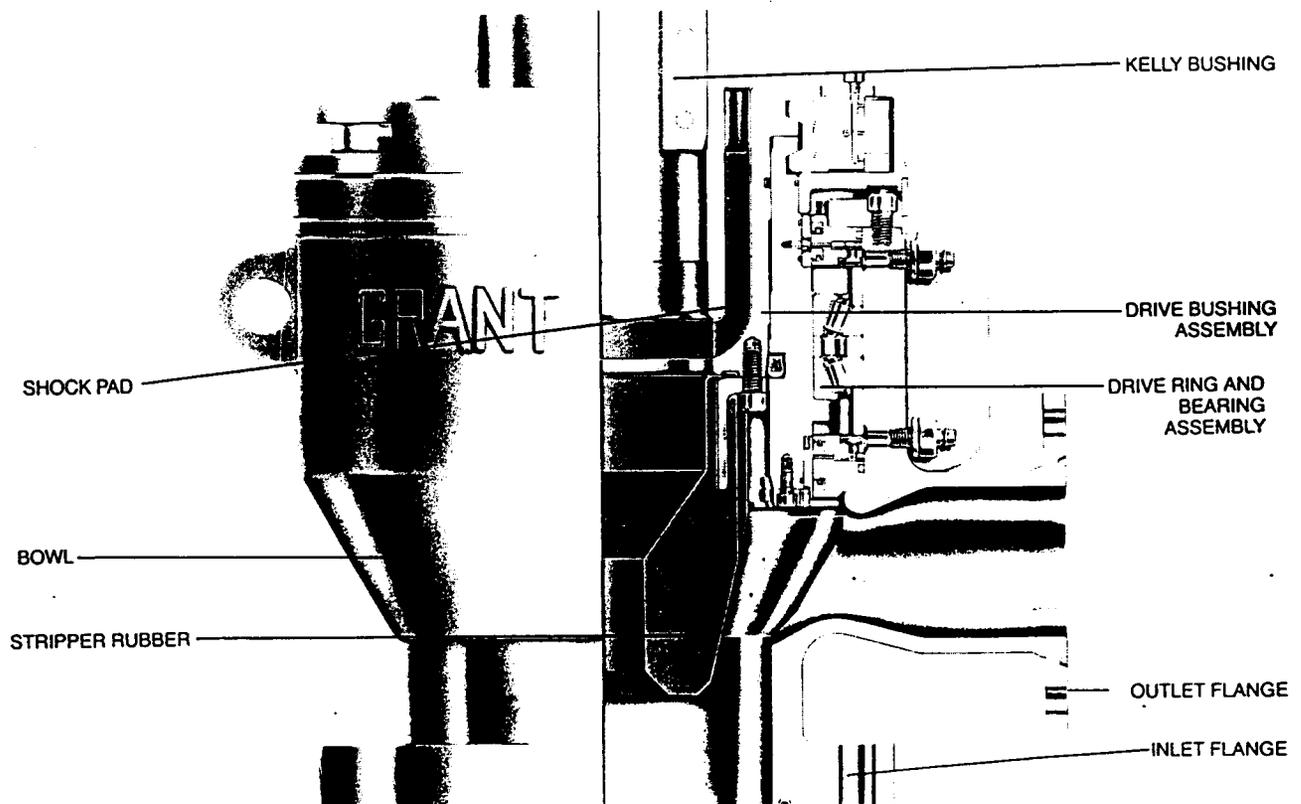
Grant Rotating Drilling Heads seal off drillstring components while diverting dust, mud, air/gas or steam away from the rig floor.

FEATURES:

- Rugged construction provides overall durability and long-range economy, proven in hundreds of thousands of hours of field use in all types of drilling environments.
- Integral lifting eyes allow ease of movement for quick hook-up to the BOP or other units.
- Stripping flexibility increased by available assortment of drive bushings/stripper rubbers for string components such as reamers and stabilizers.
- Automatic engagement/disengagement of the drive bushing by the kelly bushing as the kelly is run-in or picked-up.
- Drill bit passage, permitted with the removal of the drive bushing, is accomplished simply by loosening a single bolt clamp.
- Lateral shock loads from kelly cushioned by massive rubber insert.
- Geothermal and H₂S trim available.

Arch W. Deuel
No. #1 Deuel Fed.
SESE Section 29-T21S-R20E
Grand County, Utah
Lease No.U-55509

ROTATION HEAD DIAGRAM



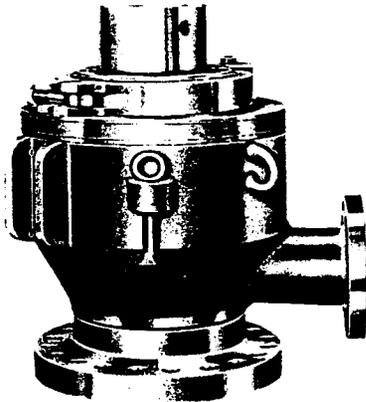
A-Z/GRANT INTERNATIONAL

GRANT ROTATING DRILLING HEADS

Model 7068

FEATURES:

- Integral body with both a side outlet and lower flange for mounting on BOP.
- Drive bushing/stripper rubber assembly will pass through 17½" rotary.
- 10" size available in "shorty" versions when space is limited beneath table.



SPECIFICATIONS FOR MODEL 7068

SIZE	LOWER FLANGE	MAXIMUM BORE	SIDE OUTLET	HEIGHT	
				W/STD. BUSHING	W/SHORT BUSHING
11"	11"-3000/5000# combination	11¼"	7½"-2000#	36"	29¾"
11" SHORTY	11"-3000/5000# combination	11¼"	7" Threaded (Male)	—	24¾"
13⅝"	13⅝"-3000#	14"	17½"-2000#	36"	29¾"
13⅝"	13⅝"-5000#	13⅝"	9"-2000#	38"	31⅞"

KELLY BUSHINGS AVAILABLE: 3½" Hex or Square, 4¼" Hex or Square, and 5¼" Hex only.

STRIPPER RUBBERS AVAILABLE: 2⅞", 3½", 4½", 5", and 5½". (Stationary casing stripper rubbers from 6⅝" thru 10¾" on special order.) Other sizes on special order.

When ordering, specify: (1) Model Number, (2) Lower Flange Size, (3) Outlet Flange Size, (4) Kelly Size and Shape, (5) Drill Pipe Size, (6) Drilling Environment, and (7) High Temperature Model, if desired.

SPECIFICATIONS FOR MODEL 7368

SIZE	LOWER FLANGE	MAXIMUM BORE	SIDE OUTLET	HEIGHT
7½"	7½"-2000/3000/5000#	7½"	4½"-2000/3000# combination	23⅞"

KELLY BUSHING: 3½" Hex or Square

STRIPPER RUBBERS: 2⅞", 2⅞", and 3½". (Special stripper rubbers, such as for wireline, on order.)

When ordering, specify: (1) Model Number, (2) Lower Flange Size, (3) Outlet Flange Size, (4) Kelly Size and Shape, (5) Drill Pipe Size, (6) Drilling Environment, and (7) High Temperature Model, if desired.

Model 7368



FEATURES:

- Same basic design as the larger models.
- Ideal for slim holes and workover jobs because height is only 23⅞".
- One piece drive bushing/stripper rubber assembly passes through 10½" rotary table.
- Available with 4½" flange or 7"-8 round thread outlet.

Arch W. Deuel
 No. #1 Deuel Fed.
 SESE Section 29-T21S-R20E
 Grand County, Utah
 Lease No.U-55509

Shaffer

**BLOWOUT PREVENTOR
 DIAGRAM**

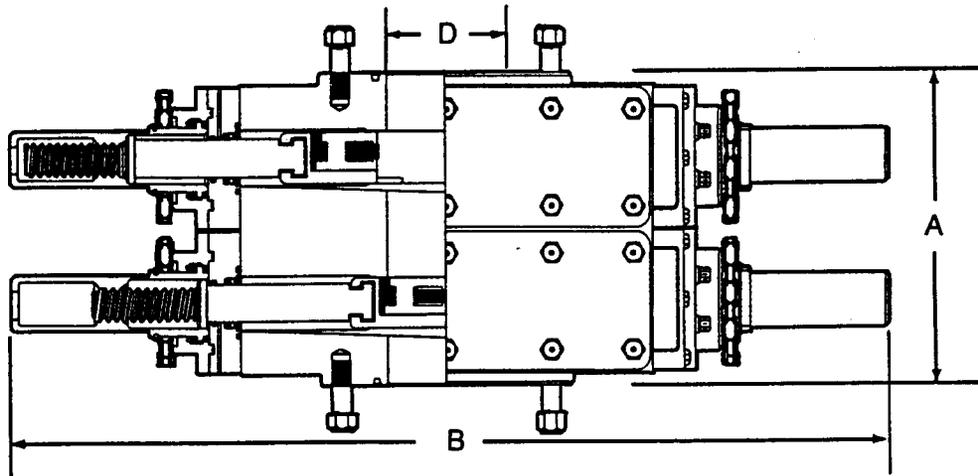
TIONS, CAPACITIES, DIMENSIONS

SENTINEL II BOP SPECIFICATIONS

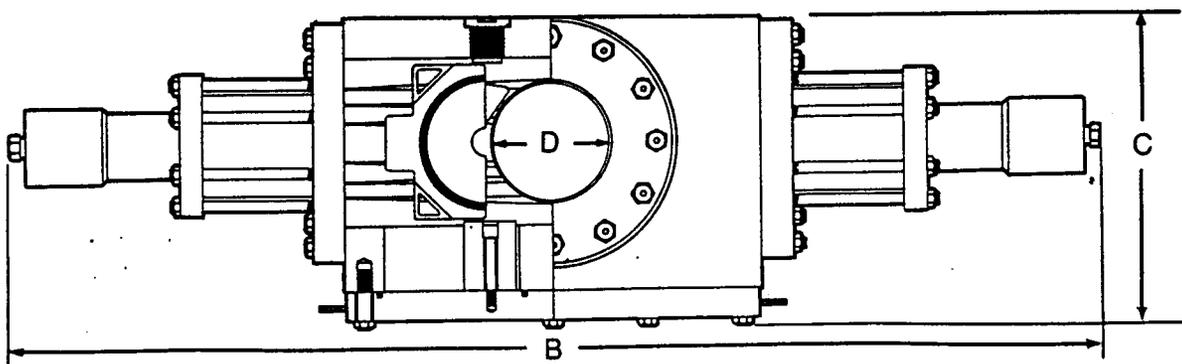
		Hydraulic		Manual	
		7 ¹ / ₈	9	7 ¹ / ₈	9
Approximate Weight (Lbs)	Single	1,152	1,272
	Double	2,095	3,700	2,335	4,100
A) Overall Height, Less Studs (Inches)	Single	10	10
	Double	18 ¹ / ₂	21 ³ / ₄	18 ¹ / ₂	21 ³ / ₄
B) Overall Length (Inches)		61 ⁷ / ₈	61 ³ / ₈	51 ¹ / ₂	67 ¹ / ₂
C) Overall Width, Less Handwheel (Inches)		18 ¹ / ₄	24 ¹ / ₈	21 ³ / ₄	27 ³ / ₄
D) Opening through Preventer (Inches)		7 ¹ / ₈	9	7 ¹ / ₈	9
Working Pressure (psi)		3,000	3,000	3,000	3,000
Test Pressure (psi)		6,000	6,000	6,000	6,000
Handwheel Diameter (Inches)		20	20	20	20
Ring Joint Gasket API Number		R-45	R-49	R-45	R-49

SENTINEL II BOP HYDRAULIC CYLINDER

	To Open		To Close	
	7 ¹ / ₈	9	7 ¹ / ₈	9
Maximum Operating Pressure (psi)	1,500	1,500	1,500	1,500
Ratio	2.5:1	2.5:1	4.0:1	4.0:1
Volume of Fluid (U.S. Gallons)	.28	.34	.29	.36
Fluid Volume per Inch of Stroke (Cu. in.)	15.6	15.6	16.5	16.5
Piston Stroke (Inches)	4.125	5.0	4.125	5.0



Manual Sentinel II BOP
 (Side View)



Hydraulic Sentinel II BOP
 (Top View)



ARCH W. DEUEL
Independent — Oil

PETROLEUM BUILDING • SUITE 203 • P.O. Box 1606 • CASPER, WYOMING 82602 • (307) 237-9337 • (307) 234-3168

October 10, 1994

Re: County Road ~~27C~~ / 146
Access to Drillsite
T. 21 S., R. 20 E.
Grand County
U T A H

Grand County Road Department
125 East Center
Moab, Utah 84532

Attention: Mr. Dave Werner

Gentlemen:

Pursuant to our telephone conversation last week regarding our desire to use County Road ~~27C~~,¹⁴⁶ also known as Thompson Long Valley Road, for access to a drillsite for a shallow gas well to be drilled in the SE $\frac{1}{4}$ of Section 29, Township 21 South, Range 20 East, we will be using a crane (truck) mounted rig with weights on front and rear axles of 33,000 lbs. and 30,000 lbs.

You have advised us that the road is not graveled. It appears that our access route will cross one cattle guard.

Please execute and return a copy of this letter for our files.

Very truly yours,

ARCH W. DEUEL

Dana H. Deuel

DHD:mjp
Enclosure

The Grand County Road Department has no objection to the use of County Road ~~27C~~ #146 for the above mentioned purposes. Dated this 14 day of October, 1994.

GRAND COUNTY ROAD DEPARTMENT

By:

Dave Werner

Title

ROAD SUPERVISOR



ARCH W. DEUEL
Independent — Oil

PETROLEUM BUILDING • SUITE 203 • P.O. Box 1606 • CASPER, WYOMING 82602 • (307) 237-9337 • (307) 234-3168

October 10, 1994

Re: Request for Clearance of Highway Materials Site Stipulation
U.S.A. Utah 55509
T. 21 S., R. 20 E.
Grand County
U T A H

Utah Department of Transportation
Price District
Route 3 - Box 75C5
940 South Carbon Avenue
Price, Utah 84501

Attention: Mr. Dale Jewkes,
Materials Specialist

Ladies and Gentlemen:

The above captioned Oil and Gas Lease contains a stipulation regarding a Highway Material Site Right of Way, a copy of which is attached to this letter.

Currently, we are planning to drill a shallow gas well in Section 29, Township 21 South, Range 20 East, Grand County, Utah, on a portion of the captioned Oil and Gas Lease. The Bureau of Land Management has requested that we contact you regarding our intentions and to obtain a statement that we will not be interfering with any operations you may have in Section 29.

Please review your permits in this area and, if appropriate, execute and return a copy of this letter for our files.

Very truly yours,

ARCH W. DEUEL

Dana H. Deuel

DHD:mjp
Enclosures

The Utah Department of Transportation, Price District, wherein the subject lands are located, sees no conflict with intended operations to drill a shallow gas well in Section 29, Township 21 South, Range 20 East, SLB&M, Grand County, Utah.
Dated this _____ day of October, 1994.

Title

Attached to Federal Oil and Gas Lease U-55509, covering, among other lands, the N $\frac{1}{2}$ and SE $\frac{1}{4}$ of Section 29, Township 21 South, Range 20 East, SLM, Grand Co., Utah.

U-55509.

REQUIREMENTS FOR LANDS SUBJECT TO HIGHWAY MATERIAL SITE RIGHT-OF-WAY

Lessee shall conduct operations in conformity with the following requirements:

- (1) The Utah State Department of Highways will have unrestricted rights of ingress of the property.
- (2) The lease will not conflict with the right of the Utah State Department of Highways to remove any road-building materials from the property.
- (3) The Utah State Department of Highways reserves the right to set up, operate, and maintain such facilities as are reasonable to expedite the removal, production, and use of the materials; and the lessee shall not interfere with the Highway Department's use of the property for such purposes.
- (4) The lessee will make no excavations and erect no structures on the right-of-way that might be adverse to the use and interest of the land by the Utah State Department of Highways.

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

Type of Well

Oil Well Gas Well Other

Name of Operator

Arma Geophysical Co., Inc.

Address and Telephone No.

P. O. Box 367, Casper, Wyoming 82602

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

850 FSL SE SE Sec. 29-T21S-R20E, SLM
850 FEL

5. Lease Designation and Serial No.

UTU-55509

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

#1 Deuel-Federal

9. API Well No.

10. Field and Pool, or Exploratory Area

Wildcat

11. County or Parish, State

GRand County, Utah

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

TYPE OF SUBMISSION

TYPE OF ACTION

- Notice of Intent
- Subsequent Report
- Final Abandonment Notice

- Abandonment
- Recompletion
- Plugging Back
- Casing Repair
- Altering Casing
- Other Designation of Operator

- Change of Plans
- New Construction
- Non-Routine Fracturing
- Water Shut-Off
- Conversion to Injection
- Dispose Well

(Note: Report on well completion on Well Completion or Recompletion Report and Log form.)

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

The original APD was filed by Arch W. Deuel, as operator.

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leases land or portion thereof as described below:

All of Sections 4, 5, 6, 8, W $\frac{1}{2}$ E $\frac{1}{2}$ Section 9; W $\frac{1}{2}$ Sec. 9; All of Sections 17 and 18; Lots 1, 2, 3, 4, E $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 19; W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 20; NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ S $\frac{1}{2}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 21; N $\frac{1}{2}$, SW $\frac{1}{4}$ Sec. 28; N $\frac{1}{2}$, SE $\frac{1}{4}$ Sec. 29; W $\frac{1}{2}$ Sec. 33, Township 21 South, Range 20 East, SLM, Grand County, Utah, containing 6,717.78 acres, more or less.

Lease No.: UTU-55509
Legal Description: As stated above.
BLM Bond File No.:

I hereby certify that the foregoing is true and correct

Signed Joanette W Buelt

Corp. Secretary

Date 11-28-94

(This space for Federal or State office use)

Approved by /s/ WILLIAM C. STRINGER
Conditions of approval, if any:

Associate District Manager

Date NOV 29 1994

CONDITIONS OF APPROVAL ATTACHED

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

Arma Geophysical Co., Inc.
Well No. #1 Deuel Federal
SESE Sec. 29, T. 21 S., R. 20 E.
Grand County, Utah
Lease UTU55509

CONDITIONS OF APPROVAL

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

Be advised that Arma Geophysical Co., Inc., is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT1004 (Principal - Arma Geophysical Co., Inc.) via surety consent as provided for in 43 CFR 3104.2.

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



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

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

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

November 30, 1994

Arma Geophysical Co., Inc.
P.O. Box 367
Casper, Wyoming 82602

Re: #1 Deuel - Federal Well, 850' FSL, 850' FEL, SE SE, Sec. 29, T. 21 S., R. 20 E.,
Grand County, Utah

Gentlemen:

Pursuant to Utah Admin. R. 649-3-2, Location and Siting of Wells and Utah Admin. R. 649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to drill the referenced well is hereby granted.

In addition, the following specific actions are necessary to fully comply with this approval:

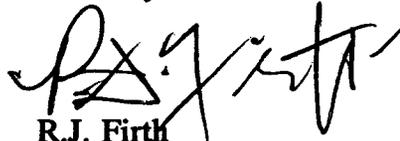
1. Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules.
2. Notification to the Division within 24 hours after drilling operations commence.
3. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
4. Submittal of the Report of Water Encountered During Drilling, Form 7.
5. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.
6. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or K. Michael Hebertson, Reclamation Specialist, (Home) (801)269-9212.



Page 2
Arma Geophysical Co., Inc.
#1 Deuel - Federal Well
November 30, 1994

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-019-31355.

Sincerely,

A handwritten signature in black ink, appearing to read 'R.J. Firth', written in a cursive style.

R.J. Firth
Associate Director

ldc
Enclosures
cc: Grand County Assessor
Bureau of Land Management, Moab District Office
WO11

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: ARMA GEOPHYSICAL

Well Name: #1 DUEL FEDERAL

API NO. 43-019-31355

Section 29 Township 21S Range 20E County GRAND

Drilling Contractor PRO PETOCO

Rig # 1

SPUDDED: Date 11/30/94

Time 4:00 PM

How ROTARY

Drilling will commence _____

Reported by MR. DUEL

Telephone # 1-801-259-7141 EX 2101

Date: 12/12/94 Signed: MKH

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

RECEIVED
SUBMIT IN TRIPlicate
Contact instructions on
reverse side)
DEC 2 1994

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN
DIV OF OIL, GAS & MINING**

1a. TYPE OF WORK
 DRILL DEEPEN

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

2. NAME OF OPERATOR
 Arch W. Deuel

3. ADDRESS AND TELEPHONE NO.
 P.O. Box 1606 Casper, WY 82604

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface SESE, 850' FSL, 850' FEL
 At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 1 1/2 Miles south of Thompson, Utah

10. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest Grig. unit line, if any)
 850'

16. NO. OF ACRES IN LEASE
 6,717.78

17. NO. OF ACRES ASSIGNED TO THIS WELL
 40

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

19. PROPOSED DEPTH
 1,200'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5128 GR

22. APPROX. DATE WORK WILL START*
 November 30, 1994

5. LEASE DESIGNATION AND SERIAL NO.
 U-55509

6. INDIAN, ALLOTTEE OR TRIBE NAME
 N/A

7. UNIT AGREEMENT NAME
 N/A

8. FARM OR LEASE NAME, WELL NO.
 N/A

9. API WELL #
 43-019-31355

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec. 29, T21S-R20E

12. COUNTY OR PARISH
 Grand

13. STATE
 Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
SEE DRILLING	PLAN			

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

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

CONDITIONS OF APPROVAL ATTACHED

24. SIGNED Arch W. Deuel TITLE Owner DATE 10/22/94

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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

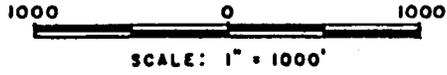
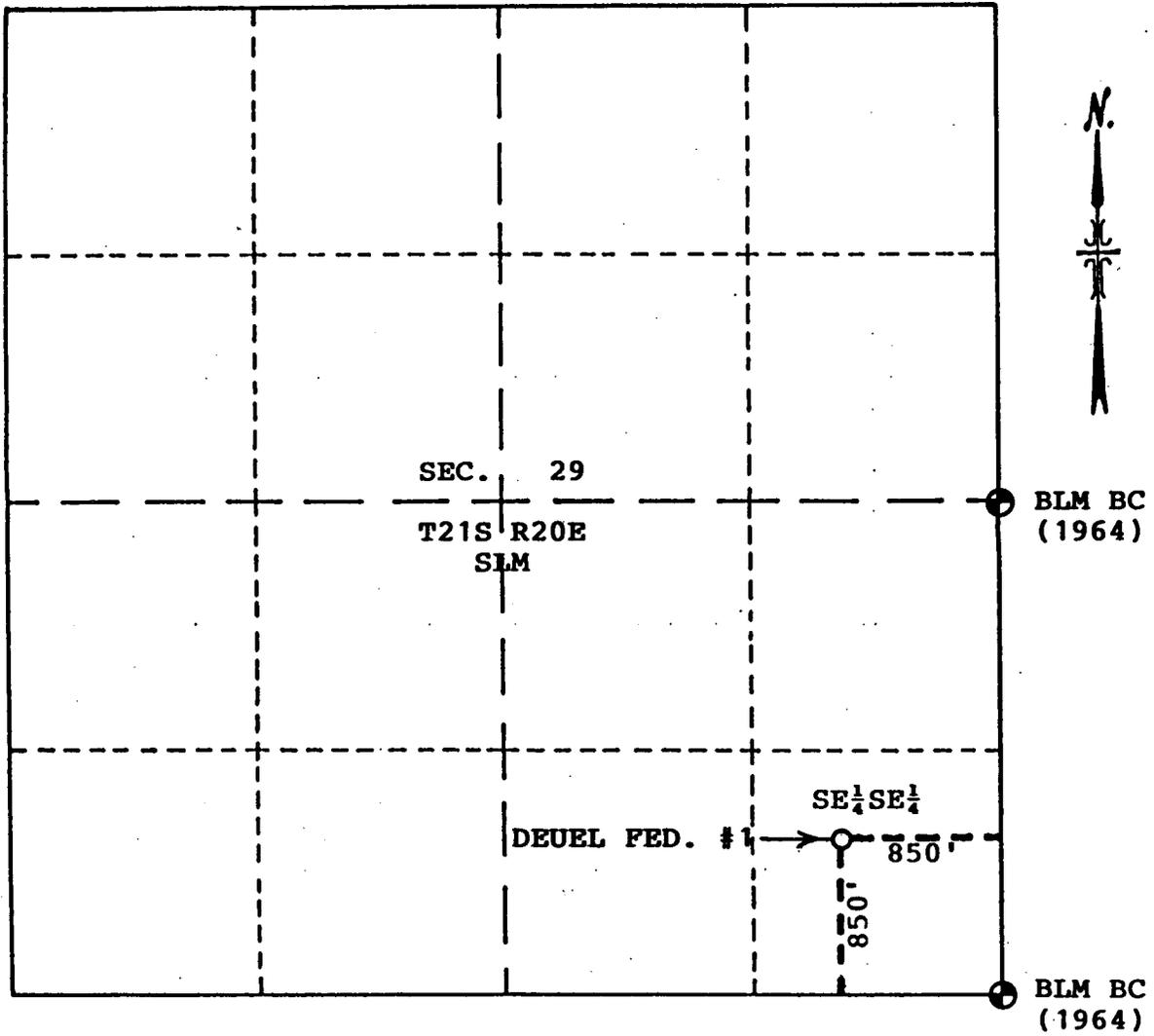
CONDITIONS OF APPROVAL, IF ANY:

/S/ WILLIAM C. STRINGER Associate District Manager NOV 29 1994

APPROVED BY _____ TITLE _____ DATE _____

*See Instructions On Reverse Side

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

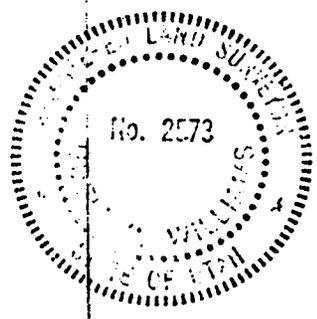


DEUEL FED. #1

Located 850 feet from the South line and 850 feet from the East line of Section 29, T21S, R20E, SLM.

Elev. 5128

Grand County, Utah



SURVEYOR'S 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

Udell S. Williams
Utah RLS No. 2573



UDELL S. WILLIAMS
Professional Land Surveyor
751 Rood Avenue (303) 243-4594
Grand Junction, Colorado 81501

PLAT OF
PROPOSED LOCATION
DEUEL FED. #1
SE 1/4 SE 1/4 SECTION 29
T21S, R20E, SLM

SURVEYED BY: USW DATE: 10/18/94
DRAWN BY: HSW DATE: 10/19/94

Arma Geophysical Co., Inc.
No. 1 Deuel Fed
Lease U-55509
SE/SE Section 29, T21S, R20E
Grand County, Utah

CONDITIONS OF APPROVAL

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

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

Bond coverage for this well is provided by UT1004 (Principal - Arma Geophysical Co., Inc.) via surety consent as provided for in 43 CFR § 3104.2.

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

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

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

A. DRILLING PROGRAM

1. If no electric logs are run, a geologist's log with sample descriptions shall be submitted with the completion report.
2. The rig shall be equipped with a choke manifold that meets the requirements for a 2M (2000 psi) system pursuant to Onshore Oil and Gas Order No. 2.
3. If a gas meter run is constructed, it will be located on lease within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and/or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provisions of 43 CFR § 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.

B. SURFACE USE PLAN

1. No drilling will be allowed from May 5 through July 1 to protect antelope fawning. The limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation may be specified in writing by the authorized officer.
2. No drilling operations will be authorized between April 15 and July 1, unless additional raptor surveys are completed prior to conducting operations to identify and avoid raptor nesting sites within 1/2 mile of the proposed action. Any peregrine falcon nesting areas identified within the project area will be avoided by 1 mile. These limitations does not apply to maintenance and operation of existing wells.
3. Surface disturbance and vehicular travel will be limited to the approved location and access route. Any additional area needed will be approved in advance.
4. Vehicle access crossing the buried power line and phone cable rights-of-way will be covered with soil and maintained to ensure there is adequate soil covering the buried rights-of-way for protection from vehicular traffic. Material excavated during construction of the reserve and blooie pits can be utilized for covering the rights-of-way.
5. The well pad and access route will be constructed and maintained to prevent soil erosion. Drainage control (waterbars, ditches, berms, crowning) will be provided as directed by the authorized officer.
6. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.6. When the well is abandoned, the abandonment marker must be at least four feet above restored ground level and must be inscribed with the following: operator name, lease number, well name and surveyed description (township, range, section and either quarter-quarter or footages).
7. The fourth side will be fenced and the top of the pit will be covered with netting of one inch or less as soon as drilling is completed, and shall remain until the pit is dry.

C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NOTIFICATIONS

Notify Jack Johnson or Rich McClure of the Grand Resource Area in Moab, Utah, at (801) 259-8193 for the following:

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

1 day prior to spudding;

50 feet prior to reaching surface casing depth;

3 hours prior to testing BOPE

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

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

Eric Jones, Petroleum Engineer

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Designation and Serial No.

UTU-55509

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

#1 Deuel-Federal

9. API Well No.

43-019-31355

10. Field and Pool, or Exploratory Area

Wildcat

11. County or Parish, State

GGrand County, Utah

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator

Arma Geophysical Co., Inc.

3. Address and Telephone No.

P. O. Box 367, Casper, Wyoming 82602

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

850 FSL SE SE Sec. 29-T21S-R20E, SLM
850 FEL

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

TYPE OF SUBMISSION

Notice of Intent
 Subsequent Report
 Final Abandonment Notice

TYPE OF ACTION

Abandonment
 Recompletion
 Plugging Back
 Casing Repair
 Altering Casing
 Other Designation of Operator
 Change of Plans
 New Construction
 Non-Routine Fracturing
 Water Shut-Off
 Conversion to Injection
 Dispose Water

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

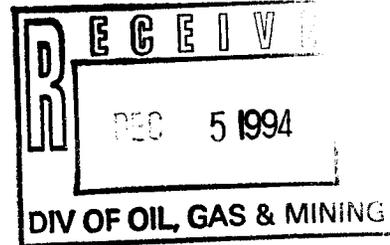
13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to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

The original APD was filed by Arch W. Deuel, as operator.

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leases land or portion thereof as described below:

All of Sections 4, 5, 6, 8, W $\frac{1}{2}$ E $\frac{1}{2}$ Section 9; W $\frac{1}{2}$ Sec. 9; All of Sections 17 and 18; Lots 1, 2, 3, 4, E $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 19; W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 20; NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ S $\frac{1}{2}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 21; N $\frac{1}{2}$, SW $\frac{1}{4}$ Sec. 28; N $\frac{1}{2}$, SE $\frac{1}{4}$ Sec. 29; W $\frac{1}{2}$ Sec. 33, Township 21 South, Range 20 East, SLM, Grand County, Utah, containing 6,717.78 acres, more or less.

Lease No.: UTU-55509
Legal Description: As stated above.
BLM Bond File No.: _____



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

Signed

Joanette W Buelt

Title

Corp. Secretary

Date

11-28-94

(This space for Federal or State office use)

Approved by _____

Title _____

Date _____

Conditions of approval, if any:

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

*See Instruction on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DEC 12 1994

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Designation and Serial No.

U-55509

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

1 - Deuel Fed.

9. API Well No.

43-019-31355

10. Field and Pool, or Exploratory Area

Wildcat

11. County or Parish, State

Grand County, Utah

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator

Arma Geophysical Co., Inc. c/o Arch W. Deuel

3. Address and Telephone No.

P.O. Box 1606 Casper, WY 82602 (307) 237-9337

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

SESE, Section 29, Township 21 South, Range 20 East
850' FSL, 850' FEL

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

TYPE OF SUBMISSION

TYPE OF ACTION

Notice of Intent
 Subsequent Report
 Final Abandonment Notice

Abandonment
 Recompletion
 Plugging Back
 Casing Repair
 Altering Casing
 Other Address Change

Change of Plans
 New Construction
 Non-Routine Fracturing
 Water Shut-Off
 Conversion to Injection
 Dispose Water

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

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

- Change mailing address: FROM: ARMA Geophysical Co., Inc.
P.O. Box 367
Casper, WY 82602

TO: ARMA Geophysical Co., Inc.
c/o Arch W. Deuel
P.O. Box 1606
Casper, WY 82602

- 10" Conductor Pipe will not be run

- 5-1/2" casing has been changed to 7", J-55, 23#

RECEIVED
FIELD OFFICE
94 DEC -6 PM 2: 11
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

Signed William C. Stringer

Title Agent

Date 12-05-94

(This space for Federal or State office use)

WILLIAM C. STRINGER

Associate District Manager

Approved by _____
Conditions of approval, if any:

Title _____

Date DEC 9 1994

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Designation and Serial No.
UTU-55509

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
#1 Deuel-Federal

9. API Well No.
43-019-31355

10. Field and Pool, or Exploratory Area
Wildcat

11. County or Parish, State
Grand County, Utah

SUBMIT IN TRIPLICATE

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
Arma Geophysical Company, Inc. c/o Arch W. Deuel

3. Address and Telephone No.
P. O. Box 1606, Casper, WY 82602 307-237-9337

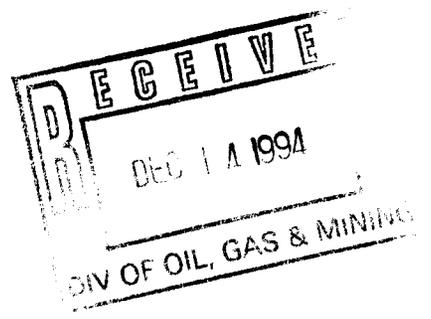
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SESE Section 29, Township 21 South, Range 20 East
850' FSL, 850' FEL

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent <input checked="" type="checkbox"/> Subsequent Report <input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Abandonment <input type="checkbox"/> Recompletion <input type="checkbox"/> Plugging Back <input type="checkbox"/> Casing Repair <input type="checkbox"/> Altering Casing <input checked="" type="checkbox"/> Other Spud Date
	<input type="checkbox"/> Change of Plans <input type="checkbox"/> New Construction <input type="checkbox"/> Non-Routine Fracturing <input type="checkbox"/> Water Shut-Off <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Dispose Water <small>(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)</small>

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

Per the requirements of the approved APD, the well was spudded on November 30, 1994 at 5:10 p.m. with one kelly down. This operation was witnessed by Jack Johnson of the Grand Resource Area BLM.



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

Signed Arch W. Deuel Title Agent Date December 12, 1994

(This space for Federal or State office use)

Approved by Ar Title _____ Date _____

Conditions of approval, if any:

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

*See Instruction on Reverse Side

OPERATOR ARMA GEOPHYSICAL COMPANY, INC.
ADDRESS P. O. Box 367
Casper, WY 82602

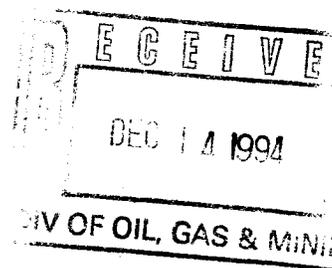
OPERATOR ACCT. NO. N 0315

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	11711	43-019-31355	#1 Deuel-Federal	SESE	29	21S.	20E.	Grand	11-30-94	
WELL 1 COMMENTS: This well is located on Federal Oil and Gas Lease UTU-55509. Any questions about this form may be directed to Arch W. Deuel, P. O. Box 1606, Casper, Wyoming 82602. 307-237-9337											
WELL 2 COMMENTS: Entity added 12-15-94. <i>lrc</i>											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

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

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

(3/89)



ARMA GEOPHYSICAL COMPANY, INC.
By: Arch W. Deuel
Signature ARCH W. Deuel
Agent 12-12-94
Title Date
Phone No. 307, 237-9337

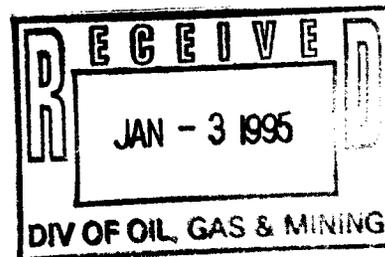
Telephone No.
(307) 472-3211

ROGER D. TESELLE
Petroleum Geologist
1557 North Mill Creek Road
Casper, Wyoming 82604

FAX
(307) 472-1852

December 30, 1994

State of Utah
Division of Oil, Gas, And Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203



ATT: Mike Hebertson

Re: Well Report
Arma Geophysical Company, Inc.
Deuel Fed. # 1
Sec. 29 T21S R20E
Grand Co. Utah
Lease # U-55509

Dear Mike,

Enclosed are three copies of the Sample Description Report, Daily Drilling Report, and a Geological Summary of the above captioned well.

If you need any additional information on the well, please call me at 307-472-3211.

The drilling contractor, Terry Leach, will be re-seeding the location as to BLM requirements. This work will begin as soon as possible.

I would like to thank you again for your cooperation in the drilling of this well.

Sincerely,

Roger D. TeSelle

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Designation and Serial No.

U-55509

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

#1 Deuel Federal

9. API Well No.

43-019-31355

10. Field and Pool, or Exploratory Area

Wildcat

11. County or Parish, State

Grand Co. Utah

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator

Arma Geophysical Company, Inc. c/o Arch W. Deuel

3. Address and Telephone No.

P.O. Box 1606, Casper, WY 82602 307-237-9337

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

SESE Sec. 29, T21S R20E

850 FSL, 850 FEL

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

TYPE OF SUBMISSION

- Notice of Intent
 Subsequent Report
 Final Abandonment Notice

TYPE OF ACTION

- Abandonment
 Recompletion
 Plugging Back
 Casing Repair
 Altering Casing
 Other _____
- Change of Plans
 New Construction
 Non-Routine Fracturing
 Water Shut-Off
 Conversion to Injection
 Dispose Water

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

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

Attached are Daily Drilling Reports, Geological Summary Report, and a Sample Description Report.

The well was P&A on December 15, 1994.

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

Signed: Raymond D. Tidwell Title: Geologist Date: 12/28/94

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

ARMA GEOPHYSICAL COMPANY, INC.
1 DEUEL FEDERAL
SESE Sec. 29 T21S R20E
Grand Co. Utah

Daily Drilling Report

11/30/94 Rig up, drill to 26'
12/7/94 Casing, cement equipment delivered to location
12/8/94 Rig-up and begin drilling surface hole TD-46'
12/9/94 Drill surface hole to 225'
12/10/94 Ran 205' 23# 7" casing, using 3 centralizers and guide shoe, cement w/ 40
sacks cement, clean returns to surface.
12/11/94 Nipple-up and test BOP to 1500# test witnessed by Jack Johnson-BLM,
Moab.
12/12/94 Drill out wiper plug and guide shoe, drill to 706'.
12/13/94 Drill from 706-1186 SD for nite. Close in well for any pressure build-up.
12/14/94 Check well for pressure build-up, 0# on pressure gauge. Drill to 1366'.
Top Ferron SS at 1320' SD at 1366' for 2 hours and blow well no flare.
Call BLM for plugging orders. SD for night.
12/15/94 Meet with Eric Jones-BLM, final plugging orders fill hole to 255' with
mud, spot 100' cement plug over casing shoe, spot 100' cement in top of
casing. Well P&A.

ARMA GEOPHYSICAL COMPANY, INC.
1 DEUEL FEDERAL
SESE Sec. 29 T21S R20E
Grand Co. Utah

Geologic Summary

The Arma Geophysical Company Inc. #1 Deuel Federal was drilled to a total depth of 1366' to test the Ferron Sandstone member of the Mancos Shale. The well was drilled from surface to total depth with air to eliminate possible formation damage caused by drilling mud. The well was spudded in the Mancos Shale and drilled to 225' and 7" casing was set to 205'. There was no surface water encountered during the drilling of the surface hole. The well was then drilled to 706' and shut down for the night. Drilling operations were then resumed and the well was drilled to 1186' and shut in for the night with a pressure gauge on the casing to detect any gas buildup overnight. There was no pressure build-up observed and drilling was resumed. A slow drilling break was observed at 1320'. This drilling break was the top of the Ferron Sandstone. Sandstone was observed in samples which was light gray to white very fine grained and clay filled. Drilling time broke back to that observed in drilling the shale section at 1356' and black shale was again observed in cuttings. The well was shut-in for approximately 2 hours and blown clean with air. There was no flare observed from this blow. The Ferron Sandstone is very tight and not capable of commercial production at this drill site. The well was adequately tested for hydrocarbons and found to be barren. It was decided to plug and abandon the well on 12/15/94.

Prepared by:
Roger D. TeSelle
Petroleum Geologist
1557 N. Mill Creek Road
Casper, Wyoming 82604

ARMA GEOPHYSICAL COMPANY, INC.
 # 1 DEUEL FEDERAL
 SESE Sec. 29 T21S R20E
 Grand Co. Utah

Sample Description Report

DEPTH	LITHO	DESCRIPTION
0-226	== ==	Shale, black-dark gray, bentonite
226	== ==	aa
246	== ==	Shale, dark gray-black, soft
266	- == ==	Shale, black, occ bent.
286	== ==	aa
306	== ==	Shale, black, tr anhy, bent
326	== ==	Shale, black
346	- == -	Shale, black, occ. bent.
366	== ==	Shale, black, occ. pyrite, white specks
386	== ==	Shale, black
406	== ==	Shale, black, occ. bent.
426	- == ==	Shale, black
446	- == ==	Shale, black
466	- == ==	Shale, black, occ. sand grains in shale
486	- == ==	Shale, black, occ. lt. gr. s&p siltstone
506	- == ==	Shale, black, hard
526	- == ==	Shale, black, hard
546	- == ==	Shale, black, hard
566	- == ==	Shale, black, sli. silty
586	- == ==	Shale, black, hard
606	- == ==	Shale, black, sli. silty
626	- == ==	Shale, black, tr. bent
646	- == ==	Shale, black, hard
666	- == ==	Shale, black, tr bent.
686	- == ==	Shale, black, hard
706	- == ==	Shale, black, hard
726	- == ==	aa
746	- == ==	Shale, black, siltstone, tan

1 DEUEL FEDERAL SESE Sec. 29 T21S R20E
Grand Co. Utah

746		Shale, black, siltstone, tan
766		Shale, black, tr. aragonite
786		Shale, black, tr. aragonite, hard streak @ 801
806		Shale, black, tr. vfg ss, fe st. tite
826		Shale, black, sandy
846		aa, tr. aragonite
866		Shale, black, sandy, hard streak @ 856
886		Shale, black, sandy
906		aa
926		Shale, black, occ. tan siltstone
946		Shale, black, occ white specks, tr. aragonite
966		Shale, black, poss fossil frag. occ vfg ss
986		Shale, black, occ vfg lt. gr. ss
1,006		Shale, black, siltst, drk gr. occ arag. lt gr. ss, tite
1,026		Shale, black, drk gr silt, occ arag.
1,046		Shale, black, siltst, drk gr. ss, lt gr, occ aragonite
1,066		Shale, black, siltst, drk gr. ss, lt gr, tr pyrite
1,086		Shale, black, siltst, drk gr.
1,106		Shale, black, siltst, drk gr. ss, lt gr, tr pyrite
1,126		Shale, black, siltst, drk gr. ss, lt gr, tr pyrite
1,146		Shale, black, siltst, drk gr. ss, lt gr, tr pyrite, occ Fe st ss
1,166		Shale, black, siltst, drk gr. ss, lt gr, tr pyrite, occ Fe st ss
1,186		Shale, black, siltst, drk gr. ss, lt gr, tr pyrite, occ Fe st ss
1,206		Shale, black,
1,226		Shale, black, siltst, drk gr. ss, lt gr, tr pyrite, occ Fe st ss
1,246		Shale, black, ss, lt. gr, s&p, vfg tite
1,266		Shale, black, siltst, drk gr.
1,286		Shale, black, siltst, drk gr. ss, lt gr, tr pyrite,
1,306		Shale, black, sandy Hard drilling @ 1,320
1,326		Shale, black, SS, lt.gr, some Fe st.
1,346		SS, white - lt gr. s&p hard and tite
1,356		SS, aa, silt, drk gr, shale, blk.
1,366		Shale, black, silt. drk gr, occ ss

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM - FORM 6

OPERATOR Arma Geophysical Company, Inc.

OPERATOR ACCT. NO. N 0315

ADDRESS P. O. Box 367

Casper, Wyoming 82602

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
E	N8200	11711	43-019-31355	#1 Deuel-Federal	SESE	29	21S	20E	Grand	11-30-94	
<p>WELL 1 COMMENTS: This well is located on Federal Oil and Gas Lease UTU-55509. Any questions about this form may be directed to Arch W. Deuel, P. O. Box 1606, Casper, Wyoming 82602. 307-237-9337. SEE ATTACHED SHEET FOR ADDITIONAL COMMENTS.</p>											
<p>WELL 2 COMMENTS: <i>Entity previously added 12-15-94. See</i></p>											
<p>WELL 3 COMMENTS:</p>											
<p>WELL 4 COMMENTS:</p>											
<p>WELL 5 COMMENTS:</p>											

ACTION CODES (See instructions on back of form)

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

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

RECEIVED

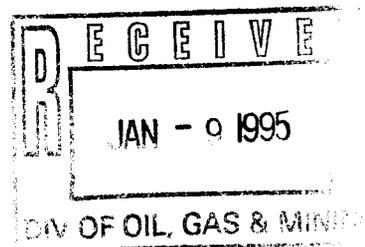
JAN - 0 1995

Arch W. Deuel
Signature

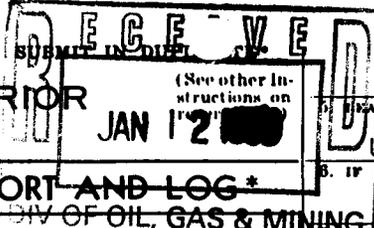
Title 1-4-95
Date

Phone No. (307) 237-9337

This is in reference to the Arma Geophysical Company, Inc. #1 Deuel-Federal well. Prior to spudding the well, the operator was changed from Arch W. Deuel to Arma Geophysical Company, Inc. The API number assigned to the well by the State of Utah, Division of Oil, Gas and Mining was 43-019-31355, and the physical location was in the SESE of Sec. 29-T21S-R20E, Grand County, Utah, on Federal Oil and Gas Lease UTU-55509. The 1366' test was spudded on 11-30-94 and completed as a **dry hole** on 12-15-94. The Utah Account Number for taxing and reporting purposes for the well is N8200.



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



FOR APPROVED
OMB NO. 1004-0137
Expires: December 31, 1991
WELL DESIGNATION AND SERIAL NO.
U-55509

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEPEN PLUG BACK DIFF. RESRV. Other

2. NAME OF OPERATOR
Arma Geophysical Corp. Inc c/o Arch W. Deuel

3. ADDRESS AND TELEPHONE NO.
P.O. Box 1606 Casper, WY 82602 (307) 237-9337

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 850' FSL 850' FEL
At top prod. interval reported below same
At total depth same

14. PERMIT NO. DATE ISSUED 11/29/94
12. COUNTY OR PARISH Grand 13. STATE Utah

15. DATE STUDDED 11/30/94 16. DATE T.D. REACHED 12/14/94 17. DATE COMPL. (Ready to prod.) P&A 12/15/94 18. ELEVATIONS (DF, RKB, RT, OR, ETC.)* 5128' GR 19. ELEV. CASING HEAD

20. TOTAL DEPTH, MD & TVD 1,366' 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY ROTARY TOOLS XXXXXX CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* NONE 25. WAS DIRECTIONAL SURVEY MADE NO

26. TYPE ELECTRIC AND OTHER LOGS RUN NONE 27. WAS WELL CORED NO

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

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
7" J55	23#	205'	8 3/4	TO SURFACE	None

29. LINER RECORD 30. TUBING RECORD

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

31. PERFORATION RECORD (Interval, size and number) N / A

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
		P&A

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

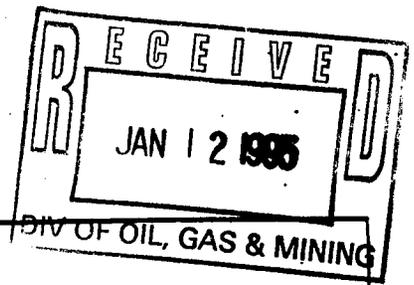
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

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

35. LIST OF ATTACHMENTS
Sample Description, Daily Reports, Geological Summary were sent with 12/28/94 Sundry Notice

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED [Signature] TITLE Geologist DATE 1/5/95

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



REPORT OF WATER ENCOUNTERED DURING DRILLING - FORM 7 (1/89)

1. Well name and number: #1 Deuel-Federal
API number: 43-019-31355
2. Well location: QQ SESE section 29 township 21S range 20E county Grand
3. Well operator: Arma Geophysical Company, Inc. - c/o Arch W. Deuel
Address: P.O. Box 1606 phone: 307-237-9337
Casper, Wyoming 82602
4. Drilling contractor: ProPetroCo, Inc.
Address: P. O. Box 283 phone: 801-259-8305
Moab, Utah 84532

5. Water encountered (continue on reverse side if necessary)

Depth		Volume (flow rate or head)	Quality (fresh or salty)
from	to		
0	1366'TD	None	

6. Formation tops: Mancos Shale - surface
Ferron SS 1320'

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

I certify that this report is true and complete to the best of my knowledge.

Name Roger D. TeSelle Signature *Roger D. TeSelle*
Title Agent/Geologist Date January 5, 1995

Comments: