

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG _____ ELECTRIC LOGS _____ FILE X WATER SANDS _____ LOCATION INSPECTED _____ SUB. REPORT/abd. _____

DATE FILED 5-01-89

LAND: FEE & PATENTED _____ STATE LEASE NO. _____ PUBLIC LEASE NO. U-54224 INDIAN _____

DRILLING APPROVED: 5-26-89

SPUDDED IN: _____

COMPLETED: LA 6-14-90 PUT TO PRODUCING: _____

INITIAL PRODUCTION: _____

GRAVITY A.P.I. _____

GOR: _____

PRODUCING ZONES: _____

TOTAL DEPTH: _____

WELL ELEVATION: _____

DATE ABANDONED: LA 6-14-90

FIELD: WILDCAT

UNIT: END OF THE RAINBOW

COUNTY: UINTAH

WELL NO. #21-1 API NO. 43-047-31863

LOCATION 1145' FSL FT. FROM (N) (S) LINE. 1941' FWL FT. FROM (E) (W) LINE. SESW 1/4 - 1/4 SEC. 21

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
11S	24E	21	MCKENZIE PETROLEUM COMPANY				



25 April 1989

McKenzie Methane Corp.
1625 Broadway, Suite 2580
Denver, Colorado 80202

Attn: Bob Sagle

Re: GRI Project No. 8903 - Cultural resources inventory report on
the proposed End of Rainbow Unit #21-1 well location and 1.5 mile
new access in Uintah County, Utah

Dear Mr. Sagle:

Enclosed are two copies of our final report on the project cited above.
The remaining copies have been distributed as indicated below. Also
enclosed is a statement for our work.

Please call me if you have any questions.

Sincerely,

Carl E. Conner
Director

CEC:cc

Enc.

Distribution:

Blaine Phillips, BLM Vernal District Office
Diane Christensen, Utah Division of State History

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APR 27 1989

U.S.
Department of the Interior
Bureau of Land Management
Utah State Office

Summary Report of
Inspection for Cultural Resources

Project
Authorization No. U-189-GIB-11810
Report Acceptable Yes No
Mitigation Acceptable Yes No
Comments: _____

1. Report Title End of Rainblow Unit #21-1

2. Development Company McKenzie Methane Corp., Denver, Colorado

3. Report Date Oct 25 1989 4. Antiquities Permit No. 88UT54939

5. Responsible Institution Grand River Inc County Utah

6. Fieldwork Location: TWN 11 S Range 24 E Section(s) 21 28
62 63 66 69 70 71 72 73 74 75 76 77
 TWN 78 81 Range 32 35 Section(s) 86 87 88 89 90 91 92 93
 7. Resource Area BIC TWN 94 97 Range 98 101 Section(s) 102 103 104 105 106 107 108 109

20=PONY EXPRESS, BR=BEAR RIVER, PR=PRICE RIVER, WS=WARM SPRINGS
 BC=BOOK CLIFFS, HR=HOUSE RANGE, SE=SEVIER RIVER
 HM=HENRY MOUNTAINS, BE=BEAVER RIVER, DX=DIXIE
 KA=KANAB, ES=ESCALANTE, SJ=SAN JUAN, GR=GRAND
 SR=SAN RAFAEL, CM=DIAMOND MOUNTAIN,
 FM in spaces 65, 69, 81, 85, 97, 101 Only if:
 V=Vernal Meridian
 H=Half Township

8. Description of Examination Procedures: A 100% pedestrian survey of the proposed well location was conducted by walking a pattern of concentric circles around the flagged center to a diameter of about 700'. The access road was walked in a zigzag transect to cover a 100' wide corridor.

9. Linear Miles Surveyed and/or 112 117
 Definable Acres Surveyed and/or 118 123
 Legally Undefinable Acres Surveyed 21 81
 (*A parcel hard to cadastrally locate i.e. center of section)

10. Inventory Type I
 I = Reconnaissance
 II = Intensive
 S = Statistical Sample

11. Description of Findings (attach appendices, if appropriate) 12. Number Sites Found: 0
 No cultural resources were identified.

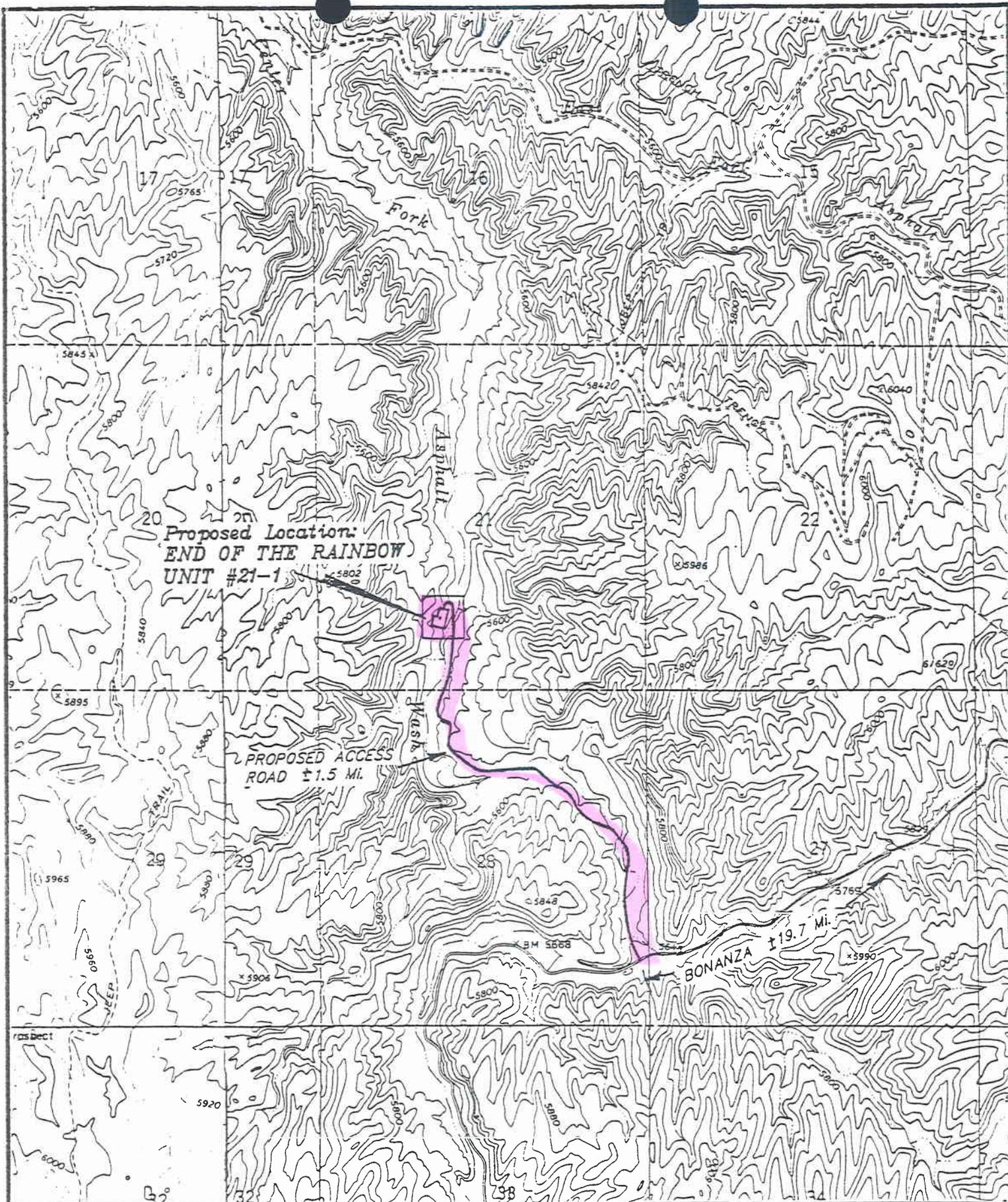
13. Collection: N Y=Yes, N=No

14. Actual/Potential National Register Properties Affected:
 None.

15. Literature Search, Location/Date: UDSH 4/21/89
 BLM 4/24/89

16. Conclusion/Recommendations:
 No further consideration of cultural resources need be given the surface extent of this project.

17. Signature of Administrator & Field Supervisor: Administrator Carl E. Conner
 Field Supervisor Carl E. Conner



RAINBOW QUADRANGLE, 1968
 Cultural Resources Inventory

McKENZIE PETROLEUM CO.

END OF THE RAINBOW UNIT #21-1
 SECTION 21, T11S, R24E, S.L.B.&M.



SCALE: 1" = 2000'

FILING FOR WATER IN THE STATE OF UTAH

Rec. by _____

Fee Rec. _____

Receipt # _____

Microfilmed _____

Roll # _____

APPLICATION TO APPROPRIATE WATER

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Title 73, Chapter 3 of the Utah Code Annotated 1953, as amended.

WATER RIGHT NUMBER: 49 - 1458

APPLICATION NO. T63872

1. PRIORITY OF RIGHT: April 18, 1989

FILING DATE: April 18, 1989

2. OWNER INFORMATION

Name: West Hazmat Trucking Corp.

Phone: (801) 722-3654

Address: PO Box 1667, Vernal, UT 84078

Interest: 100 %

3. QUANTITY OF WATER: 20.0 acre feet (Ac. Ft.)

4. SOURCE: White River DRAINAGE: SE Unita Basin
which is tributary to Green River

POINT(S) OF DIVERSION:

(1) N. 400 feet, W. 1850 feet, from the E $\frac{1}{2}$ Corner of Section 2,
Township 10 S, Range 24 E, SLB&M

COUNTY: Uintah

Description of Diverting Works: Pump from river into trucks

COMMON DESCRIPTION: 3 Mi. S. of Bonnanza

5. NATURE AND PERIOD OF USE

Oil Exploration From April 19 to April 18.

6. PURPOSE AND EXTENT OF USE

Oil Exploratio: Oil well drilling in the Ashpalt Wash area.

EXPLANATORY

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APR 20 1989

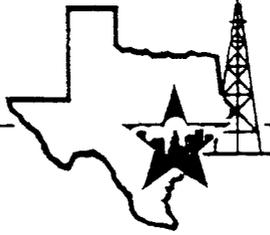
Appropriate

The applicant hereby acknowledges he/they are a citizen(s) of the United States or intends to become such a citizen.

The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purpose herein described.

The undersigned hereby acknowledges that even though he/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employee of the Division of Water Rights, all responsibility for the accuracy of the information contained therein, at the time of filing, rests with the applicant(s).

Dale Price
Signature of Applicant



McKenzie Petroleum Company

1625 Broadway, Suite 2580
Denver, CO 80202

April 28, 1989

Uintah Basin District Health Department
Uintah County Courthouse, Room 20
Vernal, UT 84078

Re: Wastewater Permit Application
SW/4 Section 21-T11S-R24E
Uintah County, Utah
End of the Rainbow #21-1 Well

Ladies and Gentlemen:

I have enclosed our check number 1123 in the amount of \$55.00, which covers the fee due for the captioned Permit. Please advise if you need anything further.

Very truly yours,

MCKENZIE METHANE CORPORATION

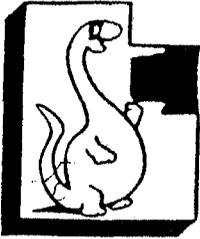
A handwritten signature in cursive script that reads "Deborah M. Olson".

Deborah M. Olson

/dmo
Enclosure
CHKTRANS.LTR

cc: Mr. Jerry Kenczka
Bureau of Land Management
Vernal District
170 South, 500 East
Vernal, UT 84078

✓ Utah Division of Oil, Gas and Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203



UINTAH BASIN DISTRICT HEALTH DEPARTMENT

Reply To:
 Uintah County Courthouse, Rm 20, Vernal, UT 84078 - (801) 781-0770
 Duchesne County Courthouse, Box 210, Duchesne, UT 84021 - (801) 738-5370
 Daggett County Courthouse, Box 156, Manila, UT 84046 - (801) 784-3494
 Roosevelt Branch Office, 57 No. 100 East (83-7), Roosevelt, UT 84066 - (801) 722-5085

Joseph B. Shaffer, M.A.
 Director
 Health Officer
 Norma Nawahine, R.N.
 Nursing Supervisor
 Lowell Card, R.S.
 Environmental Health
 Supervisor
 Carma Preece
 Office Manager

Board of Health Members

LaRae Sadlier
 LeGrand Gilbert
 Jim Reidhead
 Ellen Rawlings
 Kay Campbell
 Keith Goodspeed
 Richard Jolley, D.D.S.
 Wm. T. Durant, M.D.
 Gary Wold, M.D.

UINTAH BASIN DISTRICT HEALTH DEPARTMENT

Wastewater Permit Application for Drilling Sites

FOR DEPARTMENT USE ONLY

Permit #: _____
 Fee (\$55.00) received _____
 Approved: _____
 Date: _____

DRILLING COMPANY Olsen Drilling RESPONSIBLE PARTY Buck Olsen
 ADDRESS Denver, Co. PHONE NUMBER 303-292-9930
 DRILLING FOR Mckenzie Petroleum Corp.
 SITE LOCATION SW 1/4 Sect. 21 T11S, R24E
Uintah Co. UTAH

APPROXIMATE DATES 5/30/89 TO 6/30/89

SERVICES: POTABLE WATER YES NO, SUPPLIER West Hazmat Trucking
 CHEMICAL TOILETS YES NO, SUPPLIER Mountain West
 LIVING OR OFFICE UNITS: BUNKHOUSES _____
 MOBILE HOMES 3
 REC. VEHICLES _____

TOTAL UNITS 3
 TOTAL PERSONNEL AT SITE 9

WASTEWATER DISPOSAL PROPOSED:

HOLDING TANK AND SCAVENGER PUMPING SERVICE if this system is used, indicate the licensed scavenger employed C.C. Sanitation

SEPTIC TANK AND ABSORPTION SYSTEM If this system is proposed, please supply the following information:

1. A soil log prepared by a certified engineer or sanitarian using the unified soil classification system at least four feet below the intended absorption system depth.

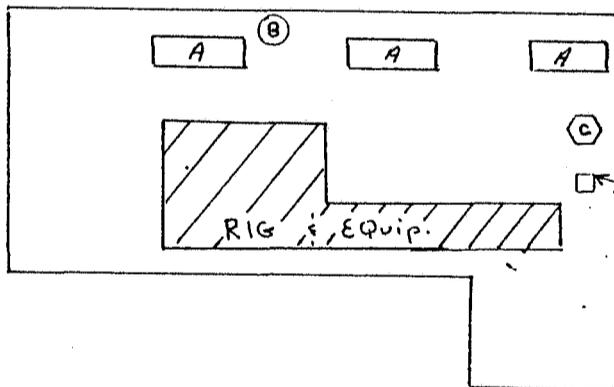
2. Indicate the type of absorption system intended

- Absorption field
- Seepage trench
- Seepage pit
- Absorption bed

OTHER Describe proposal in detail on an attached sheet.

In the space below provide a sketch or drawing of the site indicating:

1. Location of water supply and plumbing
2. Location of living units, offices etc.
3. Proposed wastewater system layout including septic tank or holding tank and absorption system if any.



- A. Mobile Trailers
- B. Drinking Water tank
- C. Holding Tank/Pump Service
- D. Extra Portable Toilet

UINTAH BASIN DISTRICT HEALTH DEPARTMENT - Daggett, Duchesne, Uintah

McKENZIE METHANE CORPORATION

1625 BROADWAY, NO. 2580 629-6699
 DENVER, CO 80202

1123

April 28 19 89

23-602/1020

PAY TO THE ORDER OF Uintah Basin District Health Department \$ 55.00

Fifty Five and no/100ths

DOLLARS

Permit/Wastewater		
SW 1/4 Section 21-T11S-R24E		
End of the Rainbow #21-1		

THIS CHECK IS DELIVERED FOR PAYMENT ON THE ACCOUNTS LISTED.

Howard Dennis

⑈001123⑈ ⑆102006025⑆ 050 1050⑈

STBANK



McKenzie Petroleum Company

1625 Broadway, Suite 2580
Denver, CO 80202
(303) 629-6699

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MAY 01 1989

DIVISION OF
OIL, GAS & MINING
April 28, 1989

Ms. Lisha Romero
Utah Division of Oil, Gas and Mining
#3 Triad Center
355 West North Temple Street, Suite 350
Salt Lake City, UT 84180-1203

Re: APD
End of the Rainbow #21-1
SW/4 Section 21-T11S-R24E
Uintah County, Utah

Dear Lisha:

I have enclosed one (1) copy of the APD for the captioned well, for your further handling. The letter of credit for our bond with the State is being processed in our Houston office and I will forward the appropriate paperwork as soon as I receive it.

Should you have any questions or need further information, please do not hesitate to give me a call.

Very truly yours,

MCKENZIE METHANE CORPORATION

Deborah M. Olson

/dmo
Enclosures
APDTRANS.LTR
SENT UPS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK
 b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE
 2. NAME OF OPERATOR
 McKenzie Petroleum Company
 3. ADDRESS OF OPERATOR
 1625 Broadway, Suite 2580, Denver, CO 80202
 4. LOCATION OF WELL (Report location clearly and in accordance with and in accordance with BLM Manual 1-1.1)
 At surface 1941' FWL, 1145' FSL, Section 21-1115-R24E
 At proposed prod. zone Same SESW
 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 60 miles South of Vernal, Utah
 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1145'
 16. NO. OF ACRES IN LEASE 640
 17. NO. OF ACRES ASSIGNED TO THIS WELL 640
 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. None
 19. PROPOSED DEPTH 4350' Mesa Verde
 20. ROTARY OR CABLE TOOLS Rotary
 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5547 GR
 22. APPROX. DATE WORK WILL START* May 30, 1989

5. LEASE DESIGNATION AND SERIAL NO.
 BLM U-54224
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 N/A
 7. UNIT AGREEMENT NAME
 End of the Rainbow
 8. FARM OR LEASE NAME
 N/A
 9. WELL NO.
 21-1
 10. FIELD AND POOL, OR WILDCAT
 Rockhouse/Rainbow Wildcat
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Section 21-1115-R24E
 12. COUNTY OR PARISH
 Uintah
 13. STATE
 Utah

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DIVISION OF
OIL, GAS & MINING

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24.0#	300'	200 sx Class B + 2% Ca Cl ₂ 325 sx hi-lift filler cement followed by 175 sx RFC containing kolite and fluid-loss materials
7-7/8"	4-1/2"	11.6#	4350'	

McKenzie Petroleum Company, as operator of the above-mentioned well, assumes responsibility for all drilling and production operations proposed herein.

Bond coverage will be provided through an irrevocable letter of credit, to be issued by MBANK-Greenway, Houston, Texas. The amount will be \$25,000.00, pursuant to 43CFR Section 3104.1-5.

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

24. SIGNED Robert J. Sagle TITLE 303-629-6699 Field Engineer DATE April 28, 1989

(This space for Federal or State office use)

PERMIT NO. 43-047-31863

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

APPROVED BY _____ TITLE _____
 CONDITIONS OF APPROVAL, IF ANY:

DATE: 5-26-89
 BY: [Signature]
 WELL SPACING: R615-2-3

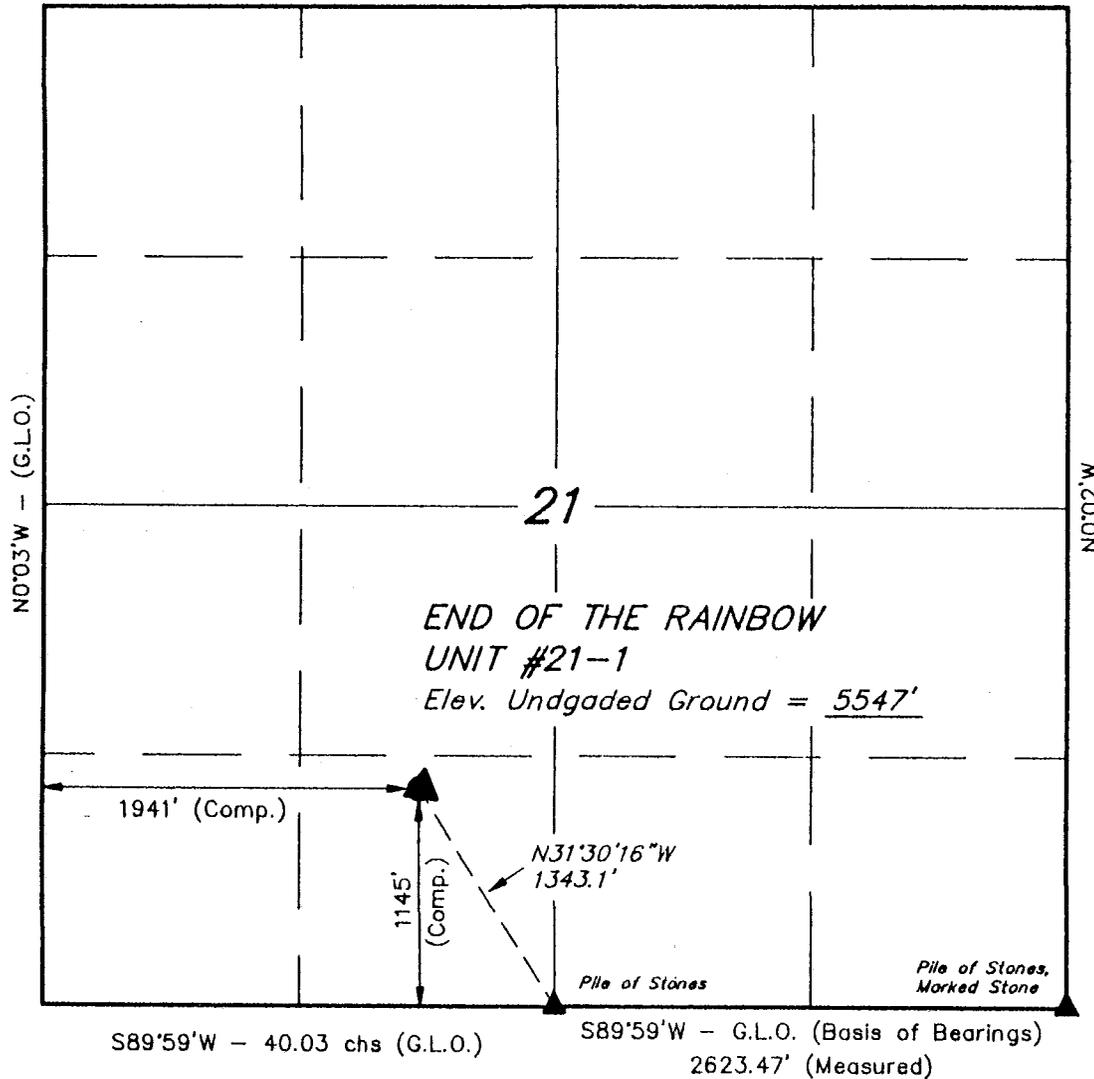
*See Instructions On Reverse Side

T11S, R24E, S.L.B.&M.

McKENZIE PETROLEUM COMPANY

Well location, END OF THE RAINBOW UNIT #21-1, located as shown in the SE 1/4 SW 1/4 of Section 21, T11S, R24E, S.L.B.&M. Uintah County, Utah.

N89°58'W - 80.04 (G.L.O.)



BASIS OF ELEVATION

BENCH MARK NEAR THE KINGS WELL ROAD IN THE SW 1/4 SE 1/4 OF SECTION 28, T11S, R24E, S.L.B.&M. TAKEN FROM THE RAINBOW QUADRANGLE, UTAH UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP). PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5668 FEET.



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APR 24 1989

CERTIFICATE AND

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

Robert L. Kay
REGISTERED LAND SURVEYOR
REGISTRATION NO. 5709
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P. O. BOX 1758 - 85 SOUTH - 200 EAST
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 4-22-89
PARTY R.K. B.M. J.R.S.	REFERENCES G.L.O. PLAT
WEATHER WARM	FILE McKENZIE PETROLEUM CO.

▲ = SECTION CORNERS LOCATED.



McKenzie Petroleum Company

1625 Broadway, Suite 2580
Denver, CO 80202
(303) 629-6699

End of the Rainbow #21-1
1941' FWL, 1145' FSL
Section 21-T11S-R24E
Uintah County, Utah

BLM Lease Number: U-54224

EIGHT POINT DRILLING PROGRAM

1. Estimated tops of Important Geologic Markers:

Green River Formation	Surface
Wasatch Formation	2285'
Mesaverde Formation	3965'

2. Estimated Depth (Interval) of Anticipated Minerals:

A. Water:	Green River Formation	Surface - 2285'
B. Oil:	none	N/A
C. Gas:	Wasatch and Mesaverde Formations	2285' - TD

Other Mineral Bearing Formations:

D. Oil Shale:	Green River Formation	Surface - 700'
---------------	-----------------------	----------------

3. Minimum Specifications for Pressure Control Equipment:
(see attached diagram)

A 3,000# double ram BOP and Hydril will be used. Accessories will include a lower kellycock, floor safety valve and a 3000# choke manifold with positive and variable chokes. BOP stack and manifold will be tested after nipping up and after any use under pressure. Pipe rams will be checked every 24-hour period and blind rams will be checked each time pipe is pulled out of the hole. Tests will be reported on daily drilling reports.

Surface casing will be tested to 1,000 psig.

Eight Point Drilling Program
Page Two

4. Proposed Casing Program:

<u>Hole size</u>	<u>Interval</u>	<u>Size</u>	<u>Wt.Gr.Jt.</u>	<u>Condition</u>
12-1/4"	sfc - 300'	8-5/8"	24#,K55,ST&C	new
7-7/8"	sfc - 4350'	4-1/2"	11.6# N80, LTC	new & used

Cementing Program:

Surface Casing: Cement with 200 sx (240 cu ft) Class B with 2% calcium Chloride sufficient to bring cement to surface.

Production Casing: Cement with 325 sx high-lift filler cement (1200 cu ft) followed by 175 sx RFC (290 cu ft) containing kolite and fluid-loss materials.

5. Type and Characteristics of Circulating Fluids:

A native, water-based mud system will be used initially, followed by a low-solids, non-dispersed (LSND) gel chemical system. If increased mud weights are required, a salt-based mud system will be used. Adequate stocks of sorbtive agents will be kept on hand to handle possible spills of fuel and oil on the surface.

<u>Depth</u>	<u>Type</u>	<u>Wt,ppg</u>	<u>Viscosity,cp</u>	<u>Fl. Loss</u>
0' - 300'	Native	8.3	80 - 100	NC
300' - 2285'	LSND	8.3-9.0	40 - 50	NC
2285' - 4350'	LSND	9.1-9.5	40 - 60	10

6. Anticipated Testing and Coring Program:

No drill stem tests are anticipated; however, plans are to run the hard rock coring tool and cut plugs of the Wasatch and Mesaverde formations. These intervals will be selected from the open hole well logs at the well site. The well logging program consists of Gamma Ray, SP, Dual Induction Log from surface to total depth and Gamma Ray, Caliper, Compensated Density - Neutron Log from the lower Green River to total depth.

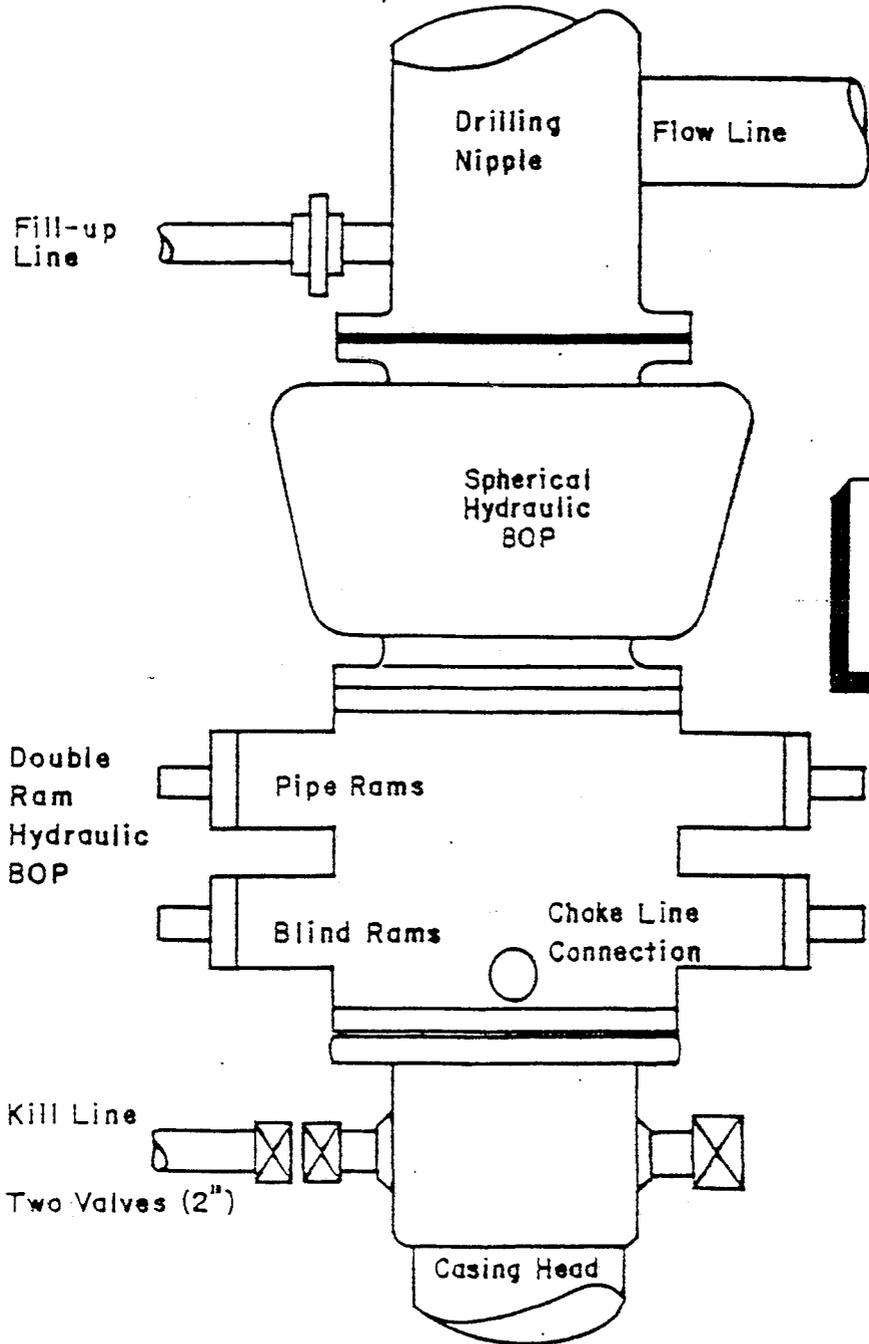
7. Anticipated Abnormal Pressures, Temperatures, etc.:

No abnormal pressures or temperatures are expected. Reservoir pressure of the Mesaverde zone is expected to be 2100 psig.

8. Operations:

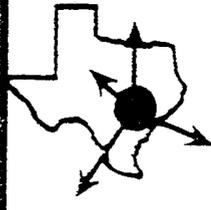
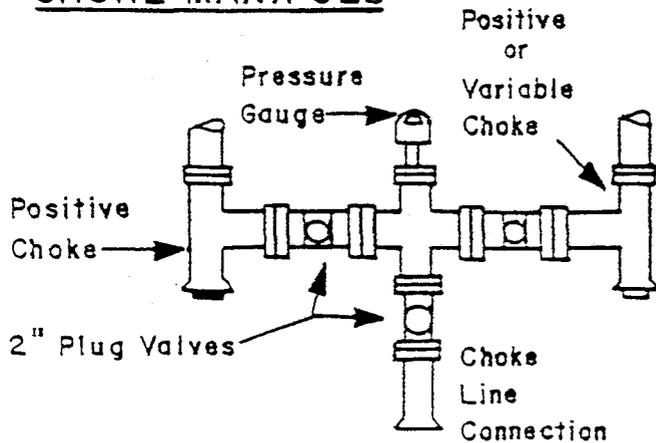
The anticipated spud date is May 30, 1989 or as soon as the Permits to Drill are received. The estimated drilling time is 8-10 days with 7-10 days for completion.

BLOWOUT PREVENTOR EQUIPMENT
3000 psi. W.P.



PRESSURE CONTROL EQUIPMENT

CHOKES MANIFOLD



McKenzie Petroleum Co.
1625 Broadway
Suite 2580
Denver, Colorado 80202



McKenzie Petroleum Company

1625 Broadway, Suite 2580
Denver, CO 80202
(303) 629-6699

End of the Rainbow #21-1
1941' FWL, 1145' FSL
Section 21-T11S-R24E
Uintah County, Utah

BLM Lease Number: U-54224

13 POINT SURFACE USE PLAN

1. Existing Roads:

- A. Refer to Topographic map.
- B. The access road to the well location begins at the Kings Well Road in the SE/4 of Section 28-Township 11 South-Range 24 East.
- C. Refer to topographic map.
- D. Existing roads will not be altered.

2. Access Road to be Constructed or Reconstructed:

(See attached map)

- A. Length of the access road is approximately 1.5 miles.
- B. Right-of-Way width is 30 feet with 18 feet maximum running surface.
- C. Maximum grade is expected to be 8% in one short section just prior to location. The majority of the access road grade is 0-5%.
- D. No turnouts are planned.
- E. The access road will be crowned and ditched for drainage purposes.
- F. No major cuts are planned. A 4 foot culvert with with necessary fill will be placed at the Center Asphalt Wash crossing just prior to the location due to anticipated heavy traffic. The access road will cross Center Asphalt Wash in five additional places using a typical dry creek drainage crossing.
- G. No surfacing material will be used.

- H. No gates, fences, or cattle guards are planned. There are no existing facilities.
 - I. All access road areas are BLM owned. The attached Unit Operating Agreement makes a right-of-way application unnecessary for the portion of the access road in Section 28.
3. Location of Existing Wells Within 1 Mile:
- A. No wells of any kind exist within one mile of the proposed location.
4. Location of Existing and/or Proposed Facilities:
- A. On well pad: see attached production layout plan.
 - B. Off well pad: no facilities proposed.
5. Location and Type of Water Supply:
- A. Water will be supplied to the location from Evacuation Creek near the Watson Ghost Town in Township 11 South-Range 25 East, or from the White River just south of Bonanza.
 - B. Water will be transported by West Hazmat Trucking Corp., Vernal, Utah. Permit #49-1458 is attached.
 - C. No water well will be drilled.
6. Construction Materials:
- A. Construction materials required to install a 4 foot culvert in Center Asphalt Wash, just prior to the location, will be obtained from the small nearby access road cut.
 - B. All access road land is owned by the BLM.
7. Methods of Handling Waste Disposal:
- A.
 - 1. Cuttings will be contained in the reserve pit.
 - 2. Portable chemical toilets will be provided for storage of human waste.
 - 3. A trash basket will be provided for garbage and other materials.
 - 4. Salts will be confined to the reserve pit.
 - 5. Chemicals will be confined to the reserve pit.

- B. As much drilling fluid as possible will be removed from the reserve pit and hauled to Rooney's approved disposal well, the Williams #1, near Roosevelt, Utah. Produced oil or water recovered during testing will also be disposed of in the Williams #1 disposal well.

8. Ancillary Facilities:

- A. No camps, airstrips, etc., will be built during the drilling of this well.

9. Well Site Layout:

- A. See attached topographic map "A".
- B. See attached cross-section and cut-and-fill diagrams.
- C. See attached location layout.
- D. Reserve pit will be lined with bentonite to prevent fluid seepage. The pit will be fenced on three sides during drilling with a barbed-wire-topped wire mesh fence. The fourth side will be fenced when the drilling rig moves off location. A natural drainage exists on the west side of the reserve pit and will direct runoff water to the south of the location.

10. Plans for Restoration of Surface:

- A.
 - 1. As soon as possible, pit liquids will be removed and disposed of as described in Item 7B. The pit will be allowed to dry and be backfilled as soon as practical. Leveling and recontouring are planned as soon as the reserve pit has dried. Wastes and spoils materials will hauled to an approved landfill.
 - 2. Revegetation and rehabilitation will be completed as as per BLM recommendations. If the well is productive, all unused areas will be reclaimed as soon as practical. If the well is abandoned, the location and access road will be reclaimed as soon as practical.
- B.
 - 1. Upon completion of the well, the location and surrounding area will be cleared of all trash and materials not needed for production. The reserve pit will be dried and cleaned prior to backfilling and will be reclaimed within one year of well completion. All disturbed areas will be recontoured to the approximate natural contours. Stockpiled topsoil will be evenly distributed over disturbed areas. Prior to reseeding, all disturbed areas, including the access road, will be scarified and left with a rough surface. Reseeding will occur at a time and in a manner recommended by the BLM.

13-Point Surface Use Plan
Page Four

2. If the well is abandoned the location and access road, including bar ditches, culvert and road cuts will be restored to approximate natural range land conditions.

11. Surface Ownership:

All lands, including the location and access road are federally owned.

12. Other Information:

A. Topography for this area is controlled by the dominate geologic feature, West Asphalt Wash, and smaller connecting washes. Animals common to the area include deer, elk, coyote and rabbit. Vegetation is primarily sage brush. Soil is primarily sand and broken shale.

B. No other surface-use activities exist in this area.

C. A cultural resource survey was conducted April 24, 1989 by Grand River Institute of Grand Junction, Colorado. A copy of the survey is included with this application.

D. A Uintah Basin Wastewater Permit is attached.

13. I hereby certify that I, or persons under my direct supervisions have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by McKenzie Methane Corporation and its contractors and subcontractors in conformity with this plan and 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.

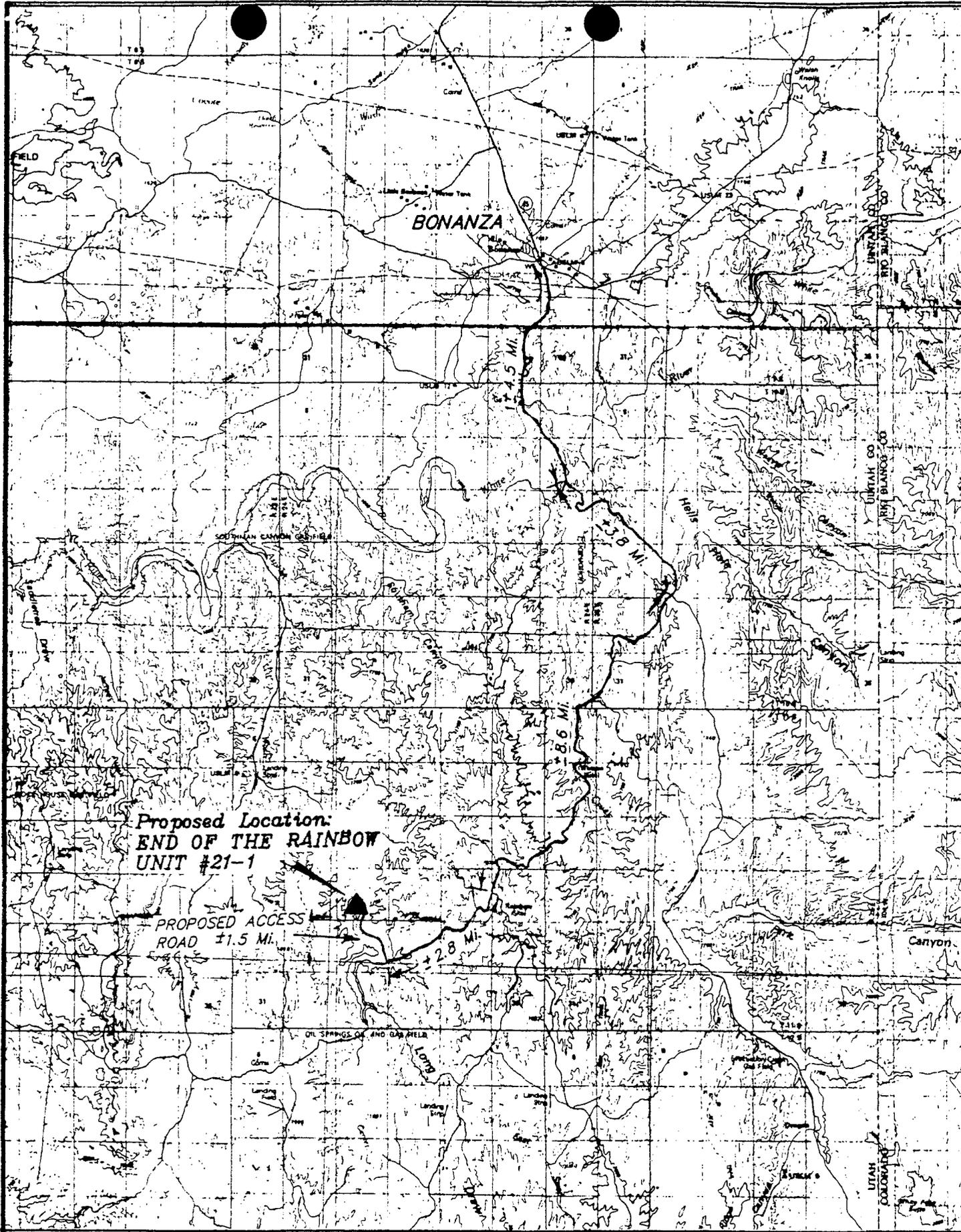
April 28, 1989
Date



Robert J. Sagle
Field Engineer

Field Representative:

McKenzie Petroleum Company
1625 Broadway, Suite 2580
Denver, CO 80202
(303) 629-6699



**Proposed Location:
END OF THE RAINBOW
UNIT #21-1**

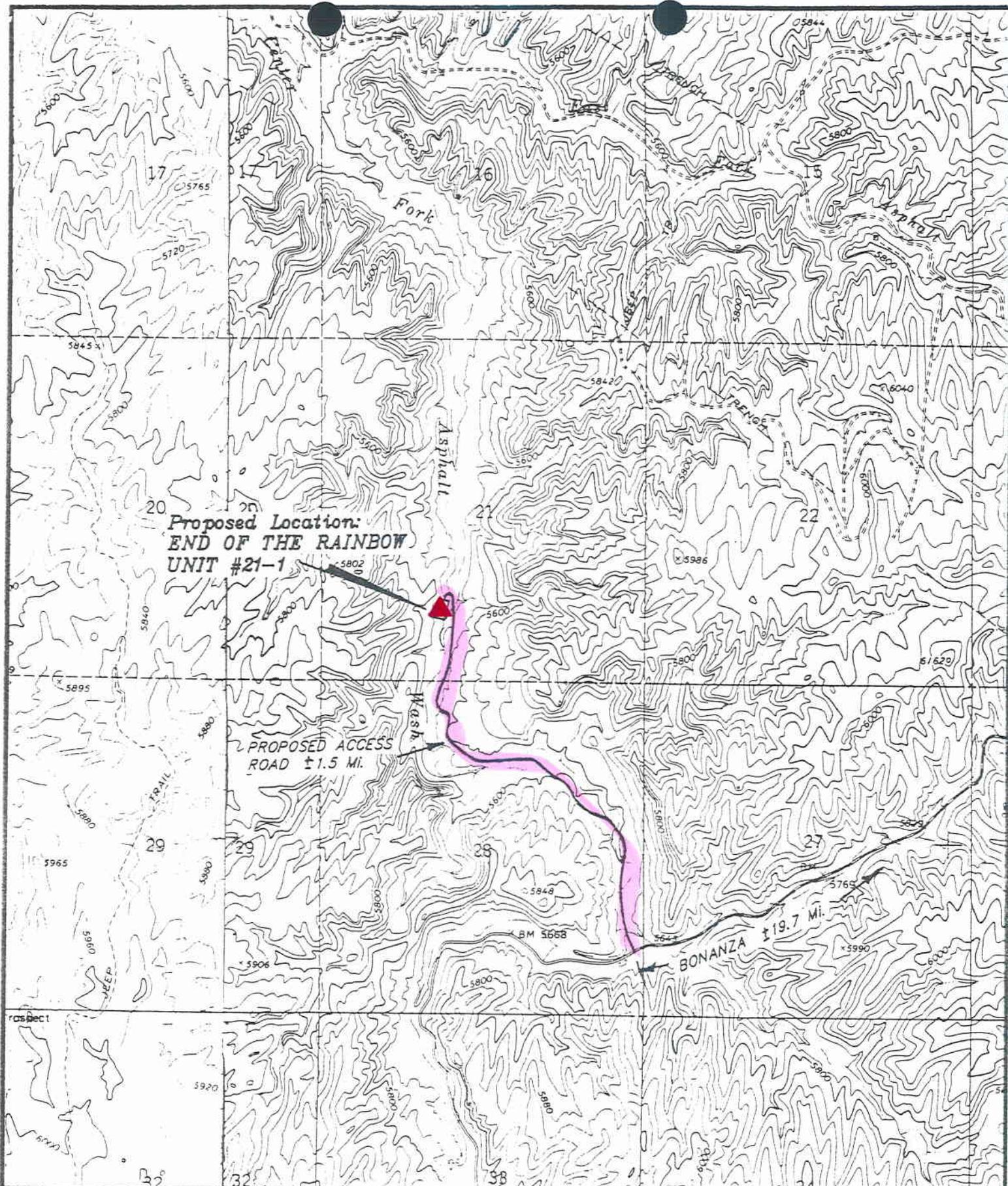
**PROPOSED ACCESS
ROAD 1.5 Mi.**

TOPOGRAPHIC
MAP "A"



McKENZIE PETROLEUM CO.

END OF THE RAINBOW UNIT #21-1
SECTION 21, T11S, R24E, S.L.B.&M.



TOPOGRAPHIC
MAP "B"

SCALE: 1" = 2000'



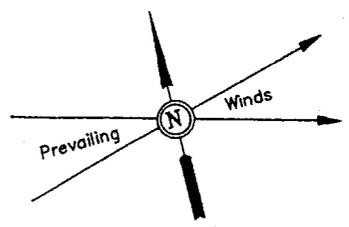
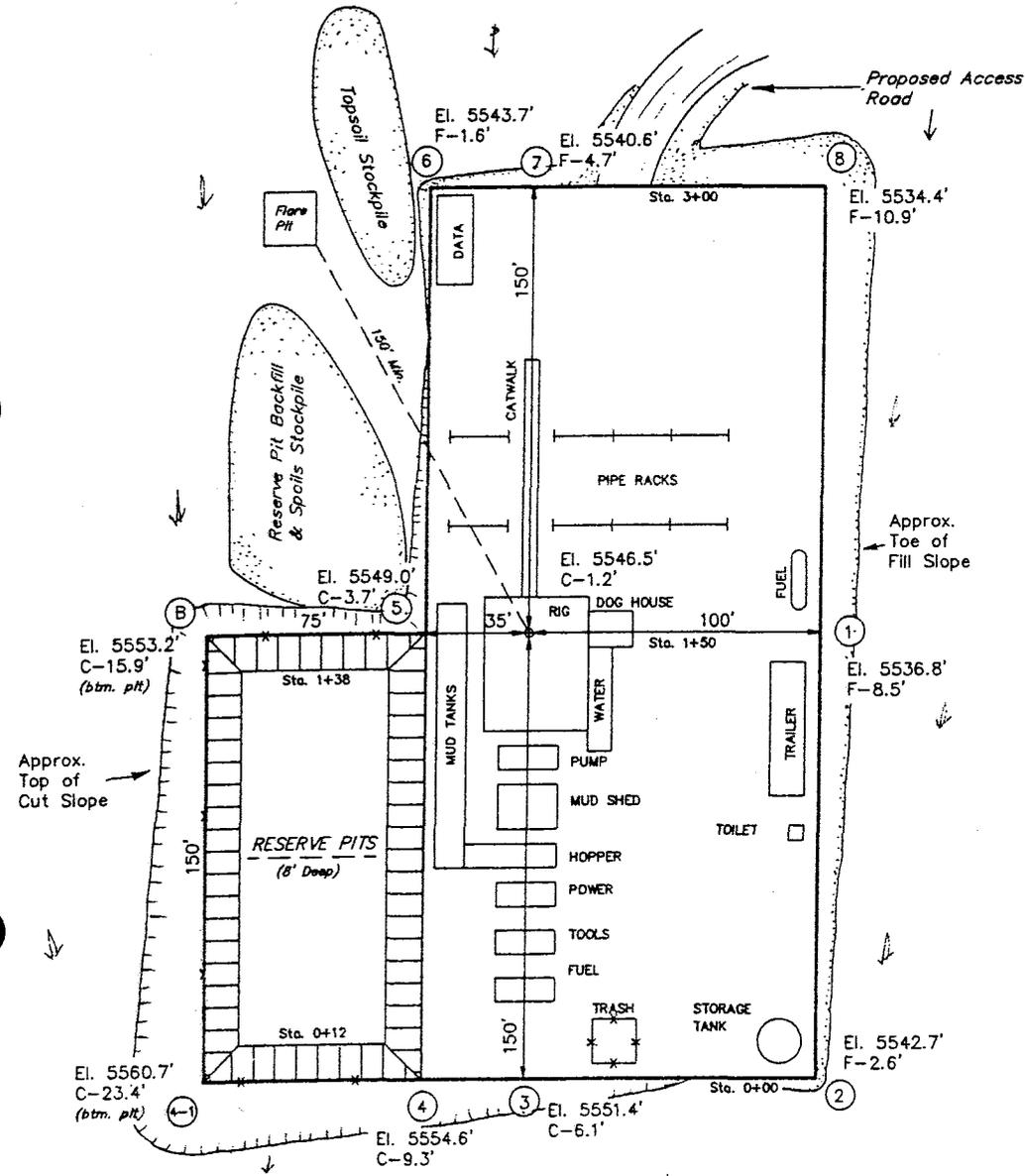
McKENZIE PETROLEUM CO.

END OF THE RAINBOW UNIT #21-1
SECTION 21, T11S, R24E, S.L.B.&M.

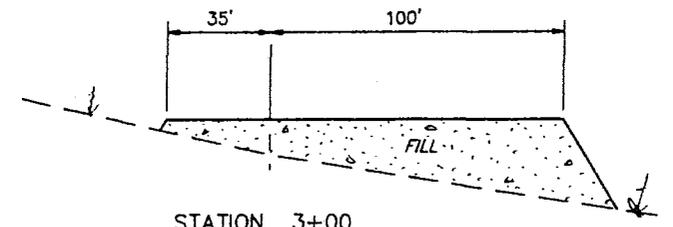
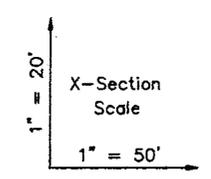
McKENZIE PETROLEUM CO.

LOCATION LAYOUT FOR

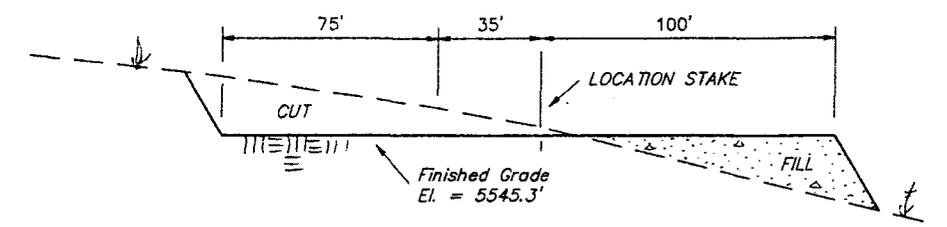
**END OF THE RAINBOW UNIT #21-1
SECTION 21, T11S, R24E, S.L.B.&M.**



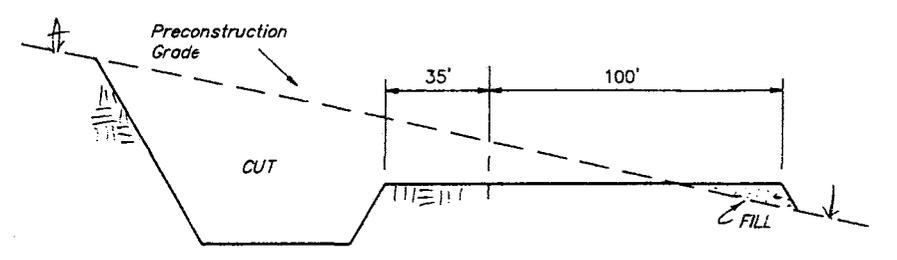
SCALE: 1" = 50'
DATE: 4-22-89



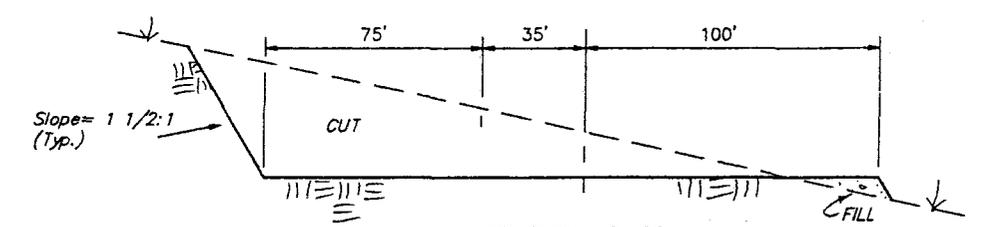
STATION 3+00



STATION 150+00



STATION 0+12



STATION 0+00

TYP. LOCATION LAYOUT TYP. CROSS SECTIONS

APPROXIMATE YARDAGES

CUT		EXCESS MATERIAL AFTER	
(6") Topsoil Stripping	= 889 Cu. Yds.	5% COMPACTION	= 3,823 Cu. Yds.
Pit Volume (Below Grade)	= 2,576 Cu. Yds.	Topsoil & Pit Backfill	= 2,177 Cu. Yds.
Remaining Location	= 6,647 Cu. Yds.	(1/2 Pit Vol.)	
TOTAL CUT	= 10,112 CU.YDS.	EXCESS UNBALANCE	= 1,646 Cu. Yds.
FILL	= 5,975 CU.YDS.	(After Rehabilitation)	

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION
OF THE
END OF THE RAINBOW UNIT AREA
COUNTY OF UINTAH
STATE OF UTAH

No. _____

THIS AGREEMENT, entered into as of the _____ day of _____, 1989, by and between the parties subscribing, ratifying, or consenting hereto, and herein referred to as the "parties hereto,"

WITNESSETH:

WHEREAS, the parties hereto are the owners of working, royalty, or other oil and gas interests in the unit area subject to this agreement; and

WHEREAS, the Mineral Leasing Act of February 25, 1920, 41 Stat. 437, as amended, 30 U. S. C. Sec. 181 et seq., authorizes Federal lessees and their representatives to unite with each other, or jointly or separately with others, in collectively adopting and operating under a unit plan of development or operation of any oil and gas pool, field, or like area, or any part thereof for the purpose of more properly conserving the natural resources thereof whenever determined and certified by the Secretary of the Interior to be necessary or advisable in the public interest; and

WHEREAS, the parties hereto hold sufficient interests in the End of the Rainbow Unit Area covering the land hereinafter described to give reasonably effective control of operations therein; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent waste, and secure other benefits obtainable through development and operation of the area subject to this agreement under the terms, conditions, and limitations herein set forth;

NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this agreement their respective interests in the below-defined unit area and agree severally among themselves as follows:

1. ENABLING ACT AND REGULATIONS. The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid pertinent regulations including operating and unit plan regulations, heretofore issued thereunder or valid, pertinent and reasonable regulations hereafter issued thereunder are accepted and made a part of this agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this agreement; and as to non-Federal lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State in which the non-Federal land is located, are hereby accepted and made a part of this agreement.

2. UNIT AREA. The area specified on the map attached hereto, marked Exhibit "A", is hereby designated and recognized as constituting the unit area, containing 11,856.89 acres, more or less.

Exhibit "A" shows, in addition to the boundary of the unit area, the boundaries and identity of tracts and leases in said area to the extent known to the Unit Operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the Unit Operator, the acreage, percentage, and kind of ownership

1 of oil and gas interests in all lands in the unit area. However, nothing herein or 1
2 in Exhibits "A" or "B" shall be construed as a representation by any party hereto 2
3 as to the ownership of any interest other than such interest or interests as are 3
4 shown in the Exhibits as owned by such party. Exhibits "A" and "B" shall be revised 4
5 by the Unit Operator whenever changes in the unit area or in the ownership interests 5
6 in the individual tracts render such revision necessary, or when requested by the 6
7 Authorized Officer, hereinafter referred to as "AO" and not less than four copies 7
8 of the revised Exhibits shall be filed with the proper Bureau of Land Management 8
9 office. 9

10
11 The above-described unit area shall when practicable be expanded to include 11
12 therein any additional lands or shall be contracted to exclude lands whenever such 12
13 expansion or contraction is deemed to be necessary or advisable to conform with the 13
14 purposes of this agreement. Such expansion or contraction shall be effected in the 14
15 following manner: 15

16
17 (a) Unit Operator, on its own motion (after preliminary concurrence by the 17
18 AO), or on demand of the AO, shall prepare a notice of proposed expansion or 18
19 contraction describing the contemplated changes in the boundaries of the unit area, 19
20 the reasons therefor, any plans for additional drilling, and the proposed effective 20
21 date of the expansion or contraction, preferably the first day of a month subse- 21
22 quent to the date of notice. 22

23
24 (b) Said notice shall be delivered to the proper Bureau of Land Management 24
25 office, and copies thereof mailed to the last known address of each working 25
26 interest owner, lessee and lessor whose interests are affected, advising that 26
27 30 days will be allowed for submission to the Unit Operator of any objections. 27
28

29 (c) Upon expiration of the 30-day period provided in the preceding item (b) 29
30 hereof, Unit Operator shall file with the AO evidence of mailing of the notice of 30
31 expansion or contraction and a copy of any objections thereto which have been filed 31
32 with Unit Operator, together with an application in triplicate, for approval of 32
33 such expansion or contraction and with appropriate joinders. 33
34

35 (d) After due consideration of all pertinent information, the expansion or 35
36 contraction shall, upon approval by the AO, become effective as of the date 36
37 prescribed in the notice thereof or such other appropriate date. 37
38

39 (e) All legal subdivisions of lands (i.e., 40 acres by Government survey or its 39
40 nearest lot or tract equivalent; in instances of irregular surveys, unusually large 40
41 lots or tracts shall be considered in multiples of 40 acres or the nearest aliquot 41
42 equivalent thereof), no parts of which are in or entitled to be in a participating 42
43 area on or before the fifth anniversary of the effective date of the first initial 43
44 participating area established under this unit agreement, shall be eliminated 44
45 automatically from this agreement, effective as of said fifth anniversary, and such 45
46 lands shall no longer be a part of the unit area and shall no longer be subject to 46
47 this agreement, unless diligent drilling operations are in progress on unitized 47
48 lands not entitled to participation on said fifth anniversary, in which event all 48
49 such lands shall remain subject hereto for so long as such drilling operations are 49
50 continued diligently, with not more than 90 days' time elapsing between the comple- 50
51 tion of one such well and the commencement of the next such well. All legal subdivi- 51
52 sions of lands not entitled to be in a participating area within 10 years after 52
53 the effective date of the first initial participating area approved under this 53
54 agreement shall be automatically eliminated from this agreement as of said tenth 54
55 anniversary. The Unit Operator shall, within 90 days after the effective date of any 55
56 elimination hereunder, describe the area so eliminated to the satisfaction of the AO 56
57 and promptly notify all parties in interest. All lands reasonably proved productive 57
58 of unitized substances in paying quantities by diligent drilling operations after 58
59 the aforesaid 5-year period shall become participating in the same manner as during 59
60 said first 5-year period. However, when such diligent drilling operations cease, 60
61 all non-participating lands not then entitled to be in a participating area shall 61
62 be automatically eliminated effective as of the 91st day thereafter. 62
63

64 Any expansion of the unit area pursuant to this section which embraces lands 64
65 theretofore eliminated pursuant to this subsection 2(e) shall not be considered 65
66 automatic commitment or recommitment of such lands. If conditions warrant extension 66

1 of the 10-year period specified in this subsection, a single extension of not to 1
2 exceed 2 years may be accomplished by consent of the owners of 90% of the working 2
3 interest in the current non-participating unitized lands and the owners of 60% of 3
4 the basic royalty interests (exclusive of the basic royalty interests of the United 4
5 States) in non-participating unitized lands with approval of the AO, provided such 5
6 extension application is submitted not later than 60 days prior to the expiration 6
7 of said 10-year period. 7
8

9 3. UNITIZED LAND AND UNITIZED SUBSTANCES. All land now or hereafter committed 9
10 to this agreement shall constitute land referred to herein as "unitized land" or 10
11 "land subject to this agreement." All oil and gas in any and all formations of the 11
12 unitized land are unitized under the terms of this agreement and herein are called 12
13 "unitized substances". 13
14

15 4. UNIT OPERATOR. McKenzie Petroleum Company is 15
16 hereby designated as Unit Operator and by signature hereto as Unit Operator agrees 16
17 and consents to accept the duties and obligations of Unit Operator for the dis- 17
18 covery, development, and production of unitized substances as herein provided. 18
19 Whenever reference is made herein to the Unit Operator, such reference means the 19
20 Unit Operator acting in that capacity and not as an owner of interest in unitized 20
21 substances, and the term "working interest owner" when used herein shall include or 21
22 refer to Unit Operator as the owner of a working interest only when such an 22
23 interest is owned by it. 23
24

25 5. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall have the 25
26 right to resign at any time prior to the establishment of a participating area or 26
27 areas hereunder, but such resignation shall not become effective so as to release 27
28 Unit Operator from the duties and obligations of Unit Operator and terminate Unit 28
29 Operator's rights as such for a period of 6 months after notice of intention to 29
30 resign has been served by Unit Operator on all working interest owners and the AO 30
31 and until all wells then drilled hereunder are placed in a satisfactory condition 31
32 for suspension or abandonment, whichever is required by the AO, unless a new Unit 32
33 Operator shall have been selected and approved and shall have taken over and 33
34 assumed the duties and obligations of Unit Operator prior to the expiration of said 34
35 period. 35
36

37 Unit Operator shall have the right to resign in like manner and subject to 37
38 like limitations as above provided at any time after a participating area estab- 38
39 lished hereunder is in existence, but in all instances of resignation or removal, 39
40 until a successor Unit Operator is selected and approved as hereinafter provided, 40
41 the working interest owners shall be jointly responsible for performance of the 41
42 duties of Unit Operator, and shall not later than 30 days before such resignation 42
43 or removal becomes effective appoint a common agent to represent them in any action 43
44 to be taken hereunder. 44
45

46 The resignation of Unit Operator shall not release Unit Operator from any 46
47 liability for any default by it hereunder occurring prior to the effective date of 47
48 its resignation. 48
49

50 The Unit Operator may, upon default or failure in the performance of its 50
51 duties or obligations hereunder, be subject to removal by the same percentage vote 51
52 of the owners of working interests as herein provided for the selection of a new 52
53 Unit Operator. Such removal shall be effective upon notice thereof to the AO. 53
54

55 The resignation or removal of Unit Operator under this agreement shall not 55
56 terminate its right, title, or interest as the owner of a working interest or other 56
57 interest in unitized substances, but upon the resignation or removal of Unit 57
58 Operator becoming effective, such Unit Operator shall deliver possession of all 58
59 wells, equipment, materials, and appurtenances used in conducting the unit 59
60 operations to the new duly qualified successor Unit Operator or to the common 60
61 agent, if no such new Unit Operator is selected, to be used for the purpose of 61
62 conducting unit operations hereunder. Nothing herein shall be construed as autho- 62
63 rizing removal of any material, equipment, or appurtenances needed for the 63
64 preservation of any wells. 64
65

66 6. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender his or its 66
67 resignation as Unit Operator or shall be removed as hereinabove provided, or a 67

1 change of Unit Operator is negotiated by the working interest owners, the owners of 1
2 the working interests according to their respective acreage interests in all uni- 2
3 tized land shall, pursuant to the Approval of the Parties requirements of the unit 3
4 operating agreement, select a successor Unit Operator. Such selection shall not 4
5 become effective until: 5
6

7 (a) a Unit Operator so selected shall accept in writing the duties and 7
8 responsibilities of Unit Operator, and 8
9

10 (b) the selection shall have been approved by the AO. 10
11

12 If no successor Unit Operator is selected and qualified as herein provided, 12
13 the AO at his election may declare this unit agreement terminated. 13
14

15 7. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. If the Unit Operator is 15
16 not the sole owner of working interests, costs and expenses incurred by Unit 16
17 Operator in conducting unit operations hereunder shall be paid and apportioned 17
18 among and borne by the owners of working interests, all in accordance with the 18
19 agreement or agreements entered into by and between the Unit Operator and the 19
20 owners of working interests, whether one or more, separately or collectively. 20
21 Any agreement or agreements entered into between the working interest owners and 21
22 the Unit Operator as provided in this section, whether one or more, are herein 22
23 referred to as the "unit operating agreement." Such unit operating agreement shall 23
24 also provide the manner in which the working interest owners shall be entitled to 24
25 receive their respective proportionate and allocated share of the benefits accruing 25
26 hereto in conformity with their underlying operating agreements, leases, or other 26
27 independent contracts, and such other rights and obligations as between Unit 27
28 Operator and the working interest owners as may be agreed upon by Unit Operator 28
29 and the working interest owners; however, no such unit operating agreement shall 29
30 be deemed either to modify any of the terms and conditions of this unit agreement 30
31 or to relieve the Unit Operator of any right or obligation established under this 31
32 unit agreement, and in case of any inconsistency or conflict between this agreement 32
33 and the unit operating agreement, this agreement shall govern. Two copies of any 33
34 unit operating agreement executed pursuant to this section shall be filed in the 34
35 proper Bureau of Land Management office, prior to approval of this unit agreement. 35
36

37 8. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as otherwise specifically 37
38 provided herein, the exclusive right, privilege, and duty of exercising any and all 38
39 rights of the parties hereto which are necessary or convenient for prospecting for, 39
40 producing, storing, allocating, and distributing the unitized substances are hereby 40
41 delegated to and shall be exercised by the Unit Operator as herein provided. 41
42 Acceptable evidence of title to said rights shall be deposited with Unit Operator 42
43 and, together with this agreement, shall constitute and define the rights, priv- 43
44 ileges, and obligations of Unit Operator. Nothing herein, however, shall be con- 44
45 strued to transfer title to any land or to any lease or operating agreement, it 45
46 being understood that under this agreement the Unit Operator, in its capacity as 46
47 Unit Operator, shall exercise the rights of possession and use vested in the 47
48 parties hereto only for the purposes herein specified. 48
49

50 9. DRILLING TO DISCOVERY. Within 6 months after the effective date hereof, 50
51 the Unit Operator shall commence to drill an adequate test well at a location 51
52 approved by the AO, unless on such effective date a well is being drilled in con- 52
53 formity with the terms hereof, and thereafter continue such drilling diligently 53
54 until _____ the upper 200 feet of the Mesaverde 54
55 formation has been tested or until at a lesser depth unitized substances shall be 55
56 discovered which can be produced in paying quantities (to-wit: quantities 56
57 sufficient to repay the costs of drilling, completing, and producing operations, 57
58 with a reasonable profit) or the Unit Operator shall at any time establish to the 58
59 satisfaction of the AO that further drilling of said well would be unwarranted or 59
60 impracticable, provided, however, that Unit Operator shall not in any event be 60
61 required to drill said well to a depth in excess of 4,350 feet. Until the 61
62 discovery of unitized substances capable of being produced in paying quantities, 62
63 the Unit Operator shall continue drilling one well at a time, allowing not more 63
64 than 6 months between the completion of one well and the commencement of drilling 64
65 operations for the next well, until a well capable of producing unitized sub- 65
66 stances in paying quantities is completed to the satisfaction of the AO or until 66

1 it is reasonably proved that the unitized land is incapable of producing unitized 1
2 substances in paying quantities in the formations drilled hereunder. Nothing in 2
3 this section shall be deemed to limit the right of the Unit Operator to resign as 3
4 provided in Section 5 hereof, or as requiring Unit Operator to commence or continue 4
5 any drilling during the period pending such resignation becoming effective in order 5
6 to comply with the requirements of this section. 6
7

8 The AO may modify any of the drilling requirements of this section by granting 8
9 reasonable extensions of time when, in his opinion, such action is warranted. 9
10

11 Until the establishment of a participating area, the failure to commence a 11
12 well subsequent to the drilling of the initial obligation well, or in the case of 12
13 multiple well requirements, if specified, subsequent to the drilling of those 13
14 multiple wells, as provided for in this (these) section(s), within the time allowed 14
15 including any extension of time granted by the AO, shall cause this agreement to 15
16 terminate automatically. Upon failure to continue drilling diligently any well 16
17 other than the obligation well(s) commenced hereunder, the AO may, after 15 days 17
18 notice to the Unit Operator, declare this unit agreement terminated. Failure to 18
19 commence drilling the initial obligation well, or the first of multiple obligation 19
20 wells, on time and to drill it diligently shall result in the unit agreement 20
21 approval being declared invalid ab initio by the AO. In the case of multiple well 21
22 requirements, failure to commence drilling the required multiple wells beyond the 22
23 first well, and to drill them diligently, may result in the unit agreement approval 23
24 being declared invalid ab initio by the AO. 24
25

26 10. PLAN OF FURTHER DEVELOPMENT AND OPERATION. Within 6 months after completion 26
27 of a well capable of producing unitized substances in paying quantities, the Unit 27
28 Operator shall submit for the approval of the AO an acceptable plan of development 28
29 and operation for the unitized land which, when approved by the AO, shall consti- 29
30 tute the further drilling and development obligations of the Unit Operator under 30
31 this agreement for the period specified therein. Thereafter, from time to time 31
32 before the expiration of any existing plan, the Unit Operator shall submit for the 32
33 approval of the AO a plan for an additional specified period for the development 33
34 and operation of the unitized land. Subsequent plans should normally be filed on a 34
35 calendar year basis not later than March 1 each year. Any proposed modification or 35
36 addition to the existing plan should be filed as a supplement to the plan. 36
37

38 Any plan submitted pursuant to this section shall provide for the timely 38
39 exploration of the unitized area, and for the diligent drilling necessary for 39
40 determination of the area or areas capable of producing unitized substances in 40
41 paying quantities in each and every productive formation. This plan shall be as 41
42 complete and adequate as the AO may determine to be necessary for timely develop- 42
43 ment and proper conservation of the oil and gas resources of the unitized area and 43
44 shall: 44
45

46 (a) specify the number and locations of any wells to be drilled and the 46
47 proposed order and time for such drilling; and 47
48

49 (b) provide a summary of operations and production for the previous year. 49
50

51 Plans shall be modified or supplemented when necessary to meet changed condi- 51
52 tions or to protect the interests of all parties to this agreement. Reasonable 52
53 diligence shall be exercised in complying with the obligations of the approved plan 53
54 of development and operation. The AO is authorized to grant a reasonable extension 54
55 of the 6 month period herein prescribed for submission of an initial plan of 55
56 development and operation where such action is justified because of unusual 56
57 conditions or circumstances. 57
58

59 After completion of a well capable of producing unitized substances in paying 59
60 quantities, no further wells, except such as may be necessary to afford protection 60
61 against operations not under this agreement and such as may be specifically 61
62 approved by the AO, shall be drilled except in accordance with an approved plan of 62
63 development and operation. 63
64

65 11. PARTICIPATION AFTER DISCOVERY. Upon completion of a well capable of pro- 65
66 ducing unitized substances in paying quantities, or as soon thereafter as required 66
67 by the AO, the Unit Operator shall submit for approval by the AO, a schedule, 67

1 based on subdivisions of the public-land survey or aliquot parts thereof, of all 1
2 land then regarded as reasonably proved to be productive of unitized substances 2
3 in paying quantities. These lands shall constitute a participating area on approval 3
4 of the AO, effective as of the date of completion of such well or the effective 4
5 date of this unit agreement, whichever is later. The acreages of both Federal 5
6 and non-Federal lands shall be based upon appropriate computations from the courses 6
7 and distances shown on the last approved public-land survey as of the effective 7
8 date of each initial participating area. The schedule shall also set forth the 8
9 percentage of unitized substances to be allocated, as provided in Section 12, to 9
10 each committed tract in the participating area so established, and shall govern 10
11 the allocation of production commencing with the effective date of the partici- 11
12 pating area. A different participating area shall be established for each separate 12
13 pool or deposit of unitized substances or for any group thereof which is produced 13
14 as a single pool or zone, and any two or more participating areas so established 14
15 may be combined into one, on approval of the AO. When production from two or more 15
16 participating areas is subsequently found to be from a common pool or deposit, 16
17 the participating areas shall be combined into one, effective as of such 17
18 appropriate date as may be approved or prescribed by the AO. The participating area 18
19 or areas so established shall be revised from time to time, subject to the approval 19
20 of the AO, to include additional lands then regarded as reasonably proved to be 20
21 productive of unitized substances in paying quantities or which are necessary for 21
22 unit operations, or to exclude lands then regarded as reasonably proved not to be 22
23 productive of unitized substances in paying quantities, and the schedule of 23
24 allocation percentages shall be revised accordingly. The effective date of any 24
25 revision shall be the first of the month in which the knowledge or information is 25
26 obtained on which such revision is predicated; provided, however, that a more 26
27 appropriate effective date may be used if justified by Unit Operator and approved 27
28 by the AO. No land shall be excluded from a participating area on account of 28
29 depletion of its unitized substances, except that any participating area established 29
30 under the provisions of this unit agreement shall terminate automatically whenever 30
31 all completions in the formation on which the participating area is based are 31
32 abandoned. 32

33
34 It is the intent of this section that a participating area shall represent the 34
35 area known or reasonably proved to be productive of unitized substances in paying 35
36 quantities or which are necessary for unit operations; but, regardless of any 36
37 revision of the participating area, nothing herein contained shall be construed as 37
38 requiring any retroactive adjustment for production obtained prior to the effective 38
39 date of the revision of the participating area. 39

40
41 In the absence of agreement at any time between the Unit Operator and the AO 41
42 as to the proper definition or redefinition of a participating area, or until a 42
43 participating area has, or areas have, been established, the portion of all pay- 43
44 ments affected thereby shall, except royalty due the United States, be impounded in 44
45 a manner mutually acceptable to the owners of committed working interests. 45
46 Royalties due the United States shall be determined by the AO and the amount 46
47 thereof shall be deposited, as directed by the AO, until a participating area is 47
48 finally approved and then adjusted in accordance with a determination of the sum 48
49 due as Federal royalty on the basis of such approved participating area. 49

50
51 Whenever it is determined, subject to the approval of the AO, that a well 51
52 drilled under this agreement is not capable of production of unitized substances in 52
53 paying quantities and inclusion in a participating area of the land on which it is 53
54 situated is unwarranted, production from such well shall, for the purposes of set- 54
55 tlement among all parties other than working interest owners, be allocated to the 55
56 land on which the well is located, unless such land is already within the partici- 56
57 pating area established for the pool or deposit from which such production is 57
58 obtained. Settlement for working interest benefits from such a nonpaying unit well 58
59 shall be made as provided in the unit operating agreement. 59

60
61 12. ALLOCATION OF PRODUCTION. All unitized substances produced from each 61
62 participating area established under this agreement, except any part thereof used 62
63 in conformity with good operating practices within the unitized area for drilling, 63
64 operating, and other production or development purposes, for repressuring or 64
65 recycling in accordance with a plan of development and operations which has been 65

1 approved by the AO, or unavoidably lost, shall be deemed to be produced equally on 1
2 an acreage basis from the several tracts of unitized land of the participating area 2
3 established for such production. For the purpose of determining any benefits 3
4 accruing under this agreement, each such tract of unitized land shall have allo- 4
5 cated to it such percentage of said production as the number of acres of such tract 5
6 included in said participating area bears to the total acres of unitized land in 6
7 said participating area, except that allocation of production hereunder for pur- 7
8 poses other than for settlement of the royalty, overriding royalty, or payment out 8
9 of production obligations of the respective working interest owners, shall be on 9
10 the basis prescribed in the unit operating agreement whether in conformity with the 10
11 basis of allocation herein set forth or otherwise. It is hereby agreed that 11
12 production of unitized substances from a participating area shall be allocated as 12
13 provided herein regardless of whether any wells are drilled on any particular part 13
14 or tract of the participating area. If any gas produced from one participating area 14
15 is used for repressuring or recycling purposes in another participating area, the 15
16 first gas withdrawn from the latter participating area for sale during the life of 16
17 this agreement, shall be considered to be the gas so transferred, until an amount 17
18 equal to that transferred shall be so produced for sale and such gas shall be 18
19 allocated to the participating area from which initially produced as such area was 19
20 defined at the time that such transferred gas was finally produced and sold. 20
21

22 13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS. Any 22
23 operator may, with the approval of the AO, at such party's sole risk, cost, and 23
24 expense, drill a well on the unitized land to test any formation provided the well 24
25 is outside any participating area established for that formation, unless within 90 25
26 days of receipt of notice from said party of his intention to drill the well, the 26
27 Unit Operator elects and commences to drill the well in a like manner as other 27
28 wells are drilled by the Unit Operator under this agreement. 28
29

30 If any well drilled under this section by a non-unit operator results in pro- 30
31 duction of unitized substances in paying quantities such that the land upon which 31
32 it is situated may properly be included in a participating area, such participating 32
33 area shall be established or enlarged as provided in this agreement and the well 33
34 shall thereafter be operated by the Unit Operator in accordance with the terms of 34
35 this agreement and the unit operating agreement. 35
36

37 If any well drilled under this section by a non-unit operator obtains produc- 37
38 tion in quantities insufficient to justify the inclusion of the land upon which 38
39 such well is situated in a participating area, such well may be operated and pro- 39
40 duced by the party drilling the same, subject to the conservation requirements of 40
41 this agreement. The royalties in amount or value of production from any such well 41
42 shall be paid as specified in the underlying lease and agreements affected. 42
43

44 14. ROYALTY SETTLEMENT. The United States and any State and any royalty owner 44
45 who is entitled to take in kind a share of the substances now unitized hereunder 45
46 shall hereafter be entitled to the right to take in kind its share of the unitized 46
47 substances, and Unit Operator, or the non-unit operator in the case of the operation 47
48 of a well by a non-unit operator as herein provided for in special cases, shall make 48
49 deliveries of such royalty share taken in kind in conformity with the applicable 49
50 contracts, laws, and regulations. Settlement for royalty interest not taken in kind 50
51 shall be made by an operator responsible therefor under existing contracts, laws and 51
52 regulations, or by the Unit Operator on or before the last day of each month for 52
53 unitized substances produced during the preceding calendar month; provided, how- 53
54 ever, that nothing in this section shall operate to relieve the responsible parties 54
55 of any land from their respective lease obligations for the payment of any 55
56 royalties due under their leases. 56
57

58 If gas obtained from lands not subject to this agreement is introduced into 58
59 any participating area hereunder, for use in repressuring, stimulation of produc- 59
60 tion, or increasing ultimate recovery, in conformity with a plan of development and 60
61 operation approved by the AO, a like amount of gas, after settlement as herein pro- 61
62 vided for any gas transferred from any other participating area and with appropriate 62
63 deduction for loss from any cause, may be withdrawn from the formation into which 63
64 the gas is introduced, royalty free as to dry gas, but not as to any products which 64
65 may be extracted therefrom; provided that such withdrawal shall be at such time as 65

1 may be provided in the approved plan of development and operation or as may other- 1
2 wise be consented to by the AO as conforming to good petroleum engineering practice; 2
3 and provided further, that such right of withdrawal shall terminate on the termi- 3
4 nation of this unit agreement. 4
5

6 Royalty due the United States shall be computed as provided in 30 CFR Group 200 6
7 and paid in value or delivered in kind as to all unitized substances on the basis 7
8 of the amounts thereof allocated to unitized Federal land as provided in Section 12 8
9 at the rates specified in the respective Federal leases, or at such other rate or 9
10 rates as may be authorized by law or regulation and approved by the AO; provided, 10
11 that for leases on which the royalty rate depends on the daily average production 11
12 per well said average production shall be determined in accordance with the operat- 12
13 ing regulations as though each participating area were a single consolidated lease. 13
14

15 15. RENTAL SETTLEMENT. Rental or minimum royalties due on leases committed 15
16 hereto shall be paid by the appropriate parties under existing contracts, laws, and 16
17 regulations, provided that nothing herein contained shall operate to relieve the 17
18 responsible parties of the land from their respective obligations for the payment 18
19 of any rental or minimum royalty due under their leases. Rental or minimum royalty 19
20 for lands of the United States subject to this agreement shall be paid at the rate 20
21 specified in the respective leases from the United States unless such rental or 21
22 minimum royalty is waived, suspended, or reduced by law or by approval of the 22
23 Secretary or his duly authorized representative. 23
24

25 With respect to any lease on non-Federal land containing provisions which 25
26 would terminate such lease unless drilling operations are commenced upon the land 26
27 covered thereby within the time therein specified or rentals are paid for the priv- 27
28 ilege of deferring such drilling operations, the rentals required thereby shall, 28
29 notwithstanding any other provision of this agreement, be deemed to accrue and be- 29
30 come payable during the term thereof as extended by this agreement and until the 30
31 required drilling operations are commenced upon the land covered thereby, or until 31
32 some portion of such land is included within a participating area. 32
33

34 16. CONSERVATION. Operations hereunder and production of unitized substances 34
35 shall be conducted to provide for the most economical and efficient recovery of 35
36 said substances without waste, as defined by or pursuant to State or Federal law or 36
37 regulation. 37
38

39 17. DRAINAGE. The Unit Operator shall take such measures as the AO deems 39
40 appropriate and adequate to prevent drainage of unitized substances from unitized 40
41 land by wells on land not subject to this agreement, which shall include the 41
42 drilling of protective wells and which may include the payment of a fair and 42
43 reasonable compensatory royalty, as determined by the AO. 43
44

45 18. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions, 45
46 and provisions of all leases, subleases, and other contracts relating to explora- 46
47 tion, drilling, development, or operation for oil or gas on lands committed to this 47
48 agreement are hereby expressly modified and amended to the extent necessary to make 48
49 the same conform to the provisions hereof, but otherwise to remain in full force 49
50 and effect; and the parties hereto hereby consent that the Secretary shall and by 50
51 his approval hereof, or by the approval hereof by his duly authorized representa- 51
52 tive, does hereby establish, alter, change, or revoke the drilling, producing, 52
53 rental, minimum royalty, and royalty requirements of Federal leases committed 53
54 hereto and the regulations in respect thereto to conform said requirements to the 54
55 provisions of this agreement, and, without limiting the generality of the fore- 55
56 going, all leases, subleases, and contracts are particularly modified in accord- 56
57 ance with the following: 57
58

59 (a) The development and operation of lands subject to this agreement under 59
60 the terms hereof shall be deemed full performance of all obligations for develop- 60
61 ment and operation with respect to each and every separately owned tract subject 61
62 to this agreement, regardless of whether there is any development of any particular 62
63 tract of this unit area. 63
64

65 (b) Drilling and producing operations performed hereunder upon any tract of 65
66 unitized lands will be accepted and deemed to be performed upon and for the benefit 66
67 of each and every tract of unitized land, and no lease shall be deemed to expire by 67
68 reason of failure to drill or produce wells situated on the land therein embraced. 68

1 (c) Suspension of drilling or producing operations on all unitized lands 1
2 pursuant to direction or consent of the AO shall be deemed to constitute such 2
3 suspension pursuant to such direction or consent as to each and every tract of 3
4 unitized land. A suspension of drilling or producing operations limited to 4
5 specified lands shall be applicable only to such lands. 5
6 6

7 (d) Each lease, sublease or contract relating to the exploration, drilling, 7
8 development, or operation for oil or gas of lands other than those of the United 8
9 States committed to this agreement which, by its terms might expire prior to the 9
10 termination of this agreement, is hereby extended beyond any such term so provided 10
11 therein so that it shall be continued in full force and effect for and during the 11
12 term of this agreement. 12
13 13

14 (e) Any Federal lease committed hereto shall continue in force beyond the 14
15 term so provided therein or by law as to the land committed so long as such lease 15
16 remains subject hereto, provided that production of unitized substances in paying 16
17 quantities is established under this unit agreement prior to the expiration date 17
18 of the term of such lease, or in the event actual drilling operations are commenced 18
19 on unitized land, in accordance with provisions of this agreement, prior to the end 19
20 of the primary term of such lease and are being diligently prosecuted at that time, 20
21 such lease shall be extended for two years, and so long thereafter as oil or gas is 21
22 produced in paying quantities in accordance with the provisions of the Mineral 22
23 Leasing Act, as amended. 23
24 24

25 (f) Each sublease or contract relating to the operation and development of 25
26 unitized substances from lands of the United States committed to this agreement, 26
27 which by its terms would expire prior to the time at which the underlying lease, as 27
28 extended by the immediately preceding paragraph, will expire, is hereby extended 28
29 beyond any such term so provided therein so that it shall be continued in full 29
30 force and effect for and during the term of the underlying lease as such term is 30
31 herein extended. 31
32 32

33 (g) The segregation of any Federal lease committed to this agreement is 33
34 governed by the following provision in the fourth paragraph of Sec. 17(m) of the 34
35 Mineral Leasing Act, as amended by the Act of September 2, 1960, (74 Stat. 781-784) 35
36 (30 U.S.C. 226 (m)): "Any (Federal) lease heretofore or hereafter committed to any 36
37 such (unit) plan embracing lands that are in part within and in part outside of the 37
38 area covered by any such plan shall be segregated into separate leases as to the 38
39 lands committed and the lands not committed as of the effective date of unitization: 39
40 Provided, however, that any such lease as to the non-unitized portion shall continue 40
41 in force and effect for the term thereof but for not less than two years from the 41
42 date of such segregation and so long thereafter as oil or gas is produced in paying 42
43 quantities." If the public interest requirement is not satisfied, the segregation 43
44 of a lease and/or extension of a lease pursuant to 43 CFR 3107.3-2 and 43 CFR 44
45 3107.4, respectively, shall not be effective. 45
46 46

47 (h) Any lease, other than a Federal lease, having only a portion of its 47
48 lands committed hereto shall be segregated as to the portion committed and the 48
49 portion not committed, and the provisions of such lease shall apply separately to 49
50 such segregated portions commencing as of the effective date hereof. In the event 50
51 any such lease provides for a lump-sum rental payment, such payment shall be pro- 51
52 rated between the portions so segregated in proportion to the acreage of the 52
53 respective tracts. 53
54 54

55 19. COVENANTS RUN WITH LAND. The covenants herein shall be construed to be 55
56 covenants running with the land with respect to the interests of the parties hereto 56
57 and their successors in interest until this agreement terminates, and any grant, 57
58 transfer or conveyance of interest in land or leases subject hereto shall be and 58
59 hereby is conditioned upon the assumption of all privileges and obligations here- 59
60 under by the grantee, transferee, or other successor in interest. No assignment or 60
61 transfer of any working interest, royalty, or other interest subject hereto shall 61
62 be binding upon Unit Operator until the first day of the calendar month after Unit 62
63 Operator is furnished with the original, photostatic, or certified copy of the 63
64 instrument of transfer. 64
65 65

66 20. EFFECTIVE DATE AND TERM. This agreement shall become effective upon 66
67 approval by the AO and shall automatically terminate five (5) years from said 67
68 effective date unless: 68
69 69

1 (a) upon application by the Unit Operator such date of expiration is extended 1
2 by the AO, or 2
3 3
4 (b) it is reasonably determined prior to the expiration of the fixed term or 4
5 any extension thereof that the unitized land is incapable of production of unitized 5
6 substances in paying quantities in the formations tested hereunder, and after 6
7 notice of intention to terminate this agreement on such ground is given by the Unit 7
8 Operator to all parties in interest at their last known addresses, this agreement 8
9 is terminated with approval of the AO, or 9
10 10
11 (c) a valuable discovery of unitized substances in paying quantities has been 11
12 made or accepted on unitized land during said initial term or any extension thereof, 12
13 in which event this agreement shall remain in effect for such term and so long 13
14 thereafter as unitized substances can be produced in quantities sufficient to pay 14
15 for the cost of producing same from wells on unitized land within any participating 15
16 area established hereunder. Should production cease and diligent drilling or 16
17 reworking operations to restore production or new production are not in progress 17
18 within 60 days and production is not restored or should new production not be 18
19 obtained in paying quantities on committed lands within this unit area, this 19
20 agreement will automatically terminate effective the last day of the month in which 20
21 the last unitized production occurred, or 21
22 22
23 (d) it is voluntarily terminated as provided in this agreement. Except as 23
24 noted herein this agreement may be terminated at any time prior to the discovery 24
25 of unitized substances which can be produced in paying quantities by not less than 25
26 75 per centum, on an acreage basis, of the working interest owners signatory 26
27 hereto, with the approval of the AO. The Unit Operator shall give notice of any 27
28 such approval to all parties hereto. If the public interest requirement is not 28
29 satisfied, the approval of this unit by the AO shall be invalid. 29
30 30
31 21. RATE OF PROSPECTING, DEVELOPMENT, AND PRODUCTION. The AO is hereby vested 31
32 with authority to alter or modify from time to time, in his discretion, the 32
33 quantity and rate of production under this agreement when such quantity and rate 33
34 are not fixed pursuant to Federal or State law, or do not conform to any Statewide 34
35 voluntary conservation or allocation program which is established, recognized, and 35
36 generally adhered to by the majority of operators in such State. The above 36
37 authority is hereby limited to alteration or modifications which are in the public 37
38 interest. The public interest to be served and the purpose thereof, must be stated 38
39 in the order of alteration or modification. Without regard to the foregoing, the AO 39
40 is also hereby vested with authority to alter or modify from time to time, in his 40
41 discretion, the rate of prospecting and development and the quantity and rate of 41
42 production under this agreement when such alteration or modification is in the 42
43 interest of attaining the conservation objectives stated in this agreement and is 43
44 not in violation of any applicable Federal or State law. 44
45 45
46 Powers in this section vested in the AO shall only be exercised after notice 46
47 to Unit Operator and opportunity for hearing to be held not less than 15 days from 47
48 notice. 48
49 49
50 22. APPEARANCES. The Unit Operator shall, after notice to other parties 50
51 affected, have the right to appear for and on behalf of any and all interests 51
52 affected hereby before the Department of the Interior and to appeal from orders 52
53 issued under the regulations of said Department, or to apply for relief from any of 53
54 said regulations, or in any proceedings relative to operations before the 54
55 Department, or any other legally constituted authority; provided, however, that any 55
56 other interested party shall also have the right at its own expense to be heard in 56
57 any such proceeding. 57
58 58
59 23. NOTICES. All notices, demands, or statements required hereunder to be 59
60 given or rendered to the parties hereto shall be in writing and shall be personally 60
61 delivered to the party or parties, or sent by postpaid registered or certified 61
62 mail, to the last known address of the party or parties. 62
63 63
64 24. NO WAIVER OF CERTAIN RIGHTS. Nothing contained in this agreement shall be 64
65 construed as a waiver by any party hereto of the right to assert any legal or 65
66 constitutional right or defense as to the validity or invalidity of any law of the 66
67 State where the unitized lands are located, or of the United States, or regulations 67
68 issued thereunder in any way affecting such party, or as a waiver by any such party 68
69 of any right beyond his or its authority to waive. 69

1 25. UNAVOIDABLE DELAY. All obligations under this agreement requiring the Unit 1
2 Operator to commence or continue drilling, or to operate on, or produce unitized 2
3 substances from any of the lands covered by this agreement, shall be suspended 3
4 while the Unit Operator, despite the exercise of due care and diligence, is pre- 4
5 vented from complying with such obligations, in whole or in part, by strikes, acts 5
6 of God, Federal, State, or municipal law or agencies, unavoidable accidents, uncon- 6
7 trollable delays in transportation, inability to obtain necessary materials or 7
8 equipment in the open market, or other matters beyond the reasonable control of the 8
9 Unit Operator whether similar to matters herein enumerated or not. 9
10

1 26. NONDISCRIMINATION. In connection with the performance of work under this 11
12 agreement, the Unit Operator agrees to comply with all the provisions of Section 12
13 202 (1) to (7) inclusive of Executive Order 11246 (30 F.R. 12319), as amended, 13
14 which are hereby incorporated by reference in this agreement. 14
15

16 27. LOSS OF TITLE. In the event title to any tract of unitized land shall fail 16
17 and the true owner cannot be induced to join in this unit agreement, such tract 17
18 shall be automatically regarded as not committed hereto, and there shall be such 18
19 readjustment of future costs and benefits as may be required on account of the loss 19
20 of such title. In the event of a dispute as to title to any royalty, working inter- 20
21 est, or other interests subject thereto, payment or delivery on account thereof may 21
22 be withheld without liability for interest until the dispute is finally settled; 22
23 provided, that, as to Federal lands or leases, no payments of funds due the United 23
24 States shall be withheld, but such funds shall be deposited as directed by the AO, 24
25 to be held as unearned money pending final settlement of the title dispute, and 25
26 then applied as earned or returned in accordance with such final settlement. 26
27

28 Unit Operator as such is relieved from any responsibility for any defect or 28
29 failure of any title hereunder. 29
30

31 28. NON-JOINDER AND SUBSEQUENT JOINDER. If the owner of any substantial inter- 31
32 est in a tract within the unit area fails or refuses to subscribe or consent to this 32
33 agreement, the owner of the working interest in that tract may withdraw the tract 33
34 from this agreement by written notice delivered to the proper Bureau of Land 34
35 Management office and the Unit Operator prior to the approval of this agreement by 35
36 the AO. Any oil or gas interests in lands within the unit area not committed hereto 36
37 prior to final approval may thereafter be committed hereto by the owner or owners 37
38 thereof subscribing or consenting to this agreement, and, if the interest is a 38
39 working interest, by the owner of such interest also subscribing to the unit 39
40 operating agreement. After operations are commenced hereunder, the right of subse- 40
41 quent joinder, as provided in this section, by a working interest owner is subject 41
42 to such requirements or approval(s), if any, pertaining to such joinder, as may be 42
43 provided for in the unit operating agreement. After final approval hereof, joinder 43
44 by a non-working interest owner must be consented to in writing by the working inter-44
45 est owner committed hereto and responsible for the payment of any benefits that 45
46 may accrue hereunder in behalf of such non-working interest. A non-working interest 46
47 may not be committed to this unit agreement unless the corresponding working inter- 47
48 est is committed hereto. Joinder to the unit agreement by a working interest owner, 48
49 at any time, must be accompanied by appropriate joinder to the unit operating agree- 49
50 ment, in order for the interest to be regarded as committed to this agreement. 50
51 Except as may otherwise herein be provided, subsequent joinders to this agreement 51
52 shall be effective as of the date of the filing with the AO of duly executed 52
53 counterparts of all or any papers necessary to establish effective commitment of 53
54 any interest and/or tract to this agreement. 54
55

56 29. COUNTERPARTS. This agreement may be executed in any number of counterparts, 56
57 no one of which needs to be executed by all parties, or may be ratified or consented 57
58 to by separate instrument in writing specifically referring hereto and shall be 58
59 binding upon all those parties who have executed such a counterpart, ratification, 59
60 or consent hereto with the same force and effect as if all such parties had signed 60
61 the same document, and regardless of whether or not it is executed by all other 61
62 parties owning or claiming an interest in the lands within the above-described unit 62
63 area. 63

1 30. SPECIAL SURFACE STIPULATIONS. Nothing in this agreement shall modify the 1
2 special Federal lease stipulations attached to the individual Federal oil and gas 2
3 leases. 3
4 4

5 31. UTAH STATE LAND PROVISIONS. Certain of the unitized land is public land of 5
6 the State of Utah, and in connection with the approval of this Agreement by the 6
7 State Land Board of said State pursuant to applicable State Laws and Federal 7
8 regulations, it is agreed that there shall be filed with the Director of Public 8
9 Lands of said State: 9

10 10

11 (a) Two copies of the complete Unit Agreement and two copies of any revised 11
12 Exhibits "A" and "B" concurrently with the filing thereof with the AO, pursuant 12
13 to Section 2 hereof. 13
14 14

15 (b) Two copies of any notice of the proposed expansion or contraction of the 15
156 Unit Area required to be delivered to the AO pursuant to Section 2(b) hereof. 16
17 17

18 (c) Two copies of any unit operating agreement executed pursuant to Section 7 18
19 hereof. 19
20 20

21 (d) A copy of any schedule of proposed participating area submitted for 21
22 approval under Section 11, concurrently with its submission to the AO. The 22
22 Director of Public Lands of said State, or his authorized representative, shall 23
24 have a period of fifteen (15) days from receipt of said schedule within which to 24
25 file with the AO any objection thereto, together with any recommendation for 25
26 revision thereof. If such objection or recommendation is not concurred in by Unit 26
27 Operator and AO prior to submission of the schedule to the AO for approval, the 27
28 AO shall approve or disapprove the schedule after giving due consideration to the 28
29 objections and recommendations filed by the Director of Public Lands of said State 29
30 or his representative. 30
31 31

32 (e) A copy of any proposed plan of development or modification thereof, 32
33 which is filed with the AO under Section 10 hereof. 33
34 34

35 (f) A copy of all instruments of subsequent joinder executed under 35
36 Section 28 hereof. 36
37 37

36 It is further agreed that: 36
37 37

38 (1) All valid, pertinent and reasonable regulations hereafter issued 38
39 governing drilling and producing operations on non-Federal lands which are 39
40 not inconsistent with the terms hereof or the laws of the State of Utah are 40
41 hereby accepted and made a part of this agreement. 41
42 42

43 (2) Nothing in this agreement contained shall relieve lessees of the public 43
44 lands of the State of Utah from their obligations to pay rental and royalties 44
45 with respect to unitized substances allocated to such lands hereunder, at the rates 45
46 specified in their respective leases. 46
47 47

48 (3) In the event that a title dispute arises as to State lands or leases, 48
49 no payment of funds due the State of Utah shall be withheld, but such funds shall 49
50 be deposited as directed by the Director of Public Lands to be held as unearned 50
51 money pending final settlement of the title dispute, and then applied as earned or 51
52 returned in accordance with such final settlement. 52
53 53

54 Each party to this agreement, holding any lease or leases of public lands from 54
55 the State of Utah subject to this agreement, or holding any interest in or under 55
56 such lease or leases or in the production from the lands covered thereby, agrees 56
57 that said State Land Board may, and by its approval hereof, does hereby alter, 57
58 change, modify or revoke the drilling, producing and royalty requirements of such 58
59 lease or leases, and the regulations in respect thereto, to conform the provisions 59
60 of said lease or leases to the provisions of this agreement. Such parties and 60
61 said Board further agree that, except as otherwise expressly provided in this 61
62 agreement, no such lease shall be deemed to terminate or expire so long as it 62
63 shall remain committed hereto. Notwithstanding anything to the contrary in Section 63
64 18 hereof contained, should any of the public lands of the State of Utah outside 64
65 of a participating area established hereunder cease to be committed to this agree- 65
66 ment, such lands shall thereafter be free from the effect of this agreement unless 66
67 and until such lands are expressly recommitted to this agreement pursuant to 67
68 Section 28 hereof, with the approval of the State Land Board. 68

1 32. OIL SHALE STIPULATION. No wells will be drilled for oil or gas at a 1
2 location which, in the opinion of the AO, would result in undue waste of oil 2
3 shale deposits or constitute a hazard to or unduly interfere with mining other 3
4 operations being conducted for the mining and recovery of oil shale deposits or 4
5 the extraction of shale oil by in situ methods. 5
6

7 The drilling or the abandonment of any well on lands committed hereto shall 7
8 be done in accordance with applicable oil and gas operating regulations including 8
9 such requirements as the AO may prescribe as necessary to prevent the infiltration 9
10 of oil, gas or water into formations containing oil shale deposits or into mines 10
11 or workings being utilized in the extraction of such deposits. 11
12

13 IN WITNESS WHEREOF, the parties hereto have caused this agreement to be 13
14 executed and have set opposite their respective names the date of execution. 14
15

16
17 UNIT OPERATOR AND WORKING INTEREST OWNER 17

18
19 ATTEST: McKENZIE PETROLEUM COMPANY 19

20
21
22
23 By _____ 23

24
25
26 Address: 1625 Broadway 26
27 Suite 2580 27
28 Denver, CO 80202 28

29 Date of Execution: 29

30
31
32
33 STATE OF _____) 32
34) ss. 34
35 COUNTY OF _____) 35

36
37 The foregoing instrument was acknowledged before me by _____ 37

38
39 _____, as _____ 39

40
41 of _____ 41

42
43 This _____ day of _____, 19____. 43

44
45 WITNESS my hand and official seal. 45

46
47 My Commission Expires: 47

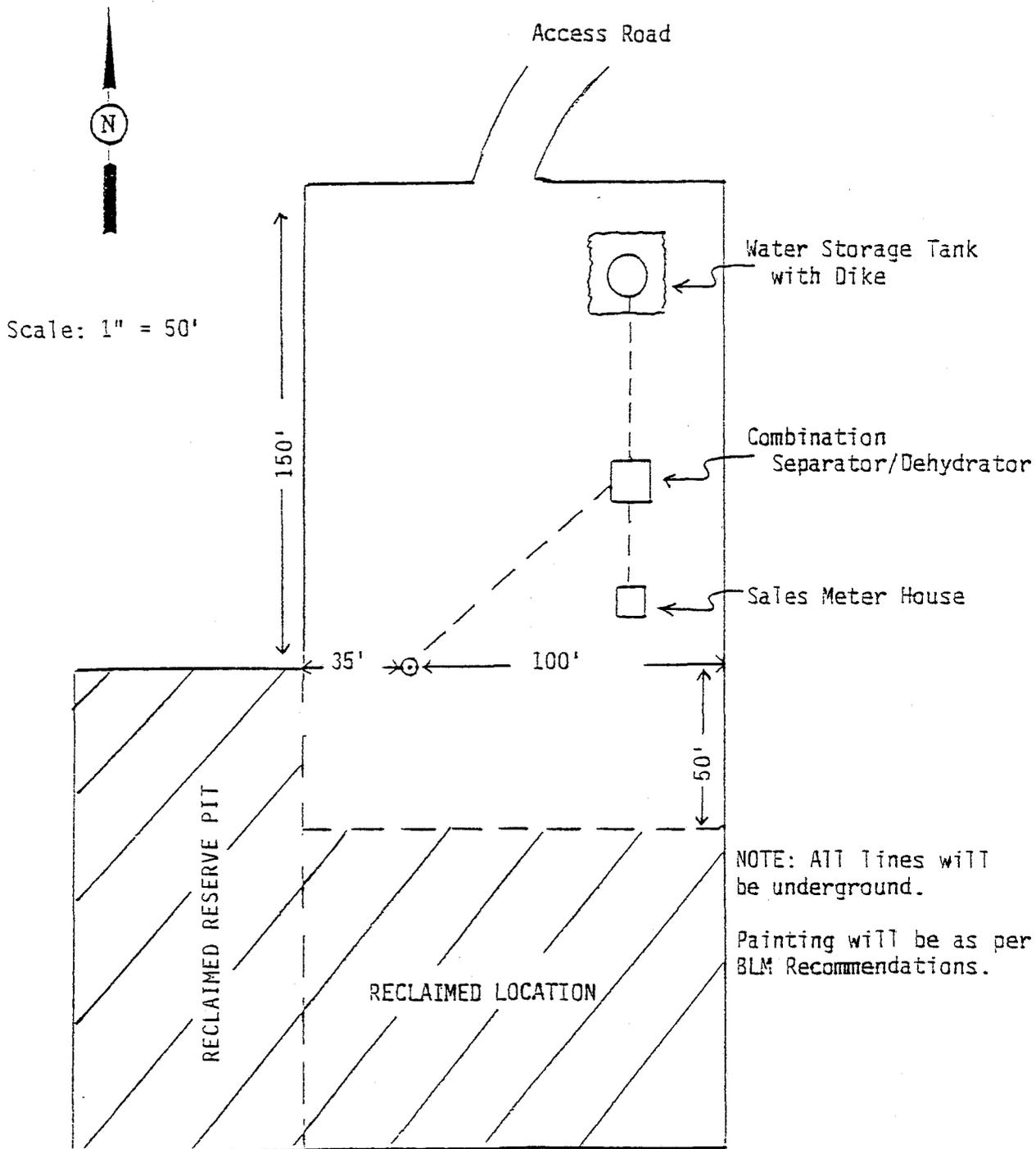
48
49 _____ 49
50 Notary Public 50

UNIT OPERATOR SIGNATURE PAGE
FOR THE UNIT AGREEMENT OF THE
END OF THE RAINBOW UNIT AREA
UINTAH COUNTY, UTAH

McKENZIE PETROLEUM COMPANY

Well location, END OF THE RAINBOW UNIT
#21-1, located as shown in the SE 1/4
SW 1/4 of Section 21, T11S, R24E, S.L.B.&M.
Uintah County, Utah.

PROPOSED PRODUCTION FACILITIES



OPERATOR McKenzie Petroleum Co. (N0090) DATE 5-5-89

WELL NAME # 21-1

SEC SESW 21 T 11S R 24E COUNTY Wintah

43-047-31863
API NUMBER

Federal
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

No other well within 920'
Water Permit 49-1458 / T63872 W. Hazmat Trucking Corp.
Proposed End of the Rainbow Unit - Approved 5-24-89. (Bfm Therese T.)
5-5-89 Not Bonded as of yet. Received letter of credit 5-24-89. (OK)

APPROVAL LETTER:

SPACING: R615-2-3 End of the Rainbow
UNIT

R615-3-2

N/A
CAUSE NO. & DATE

R615-3-3

STIPULATIONS:



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertor
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

May 26, 1989

McKenzie Petroleum Company
1625 Broadway, Suite 2580
Denver, Colorado 80202

Gentlemen:

Re: #21-1 - SE SW Sec. 21, T. 11S, R. 24E - Uintah County, Utah
1145' FSL, 1941' FWL

Approval to drill the referenced well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule R615-2-3, Oil and Gas Conservation General Rules.

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

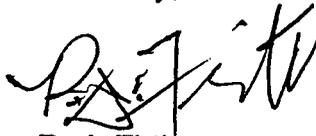
1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.
6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.

Page 2
McKenzie Petroleum Company
#21-1
May 26, 1989

7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-047-31863.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

lr
Enclosures
cc: Branch of Fluid Minerals
D. R. Nielson
WE14/1-2

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

Utah

SUNDRY NOTICES AND REPORTS

(Do not use this form for proposals to drill or to deepen or plug gas or oil in different reservoirs. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
MAY 29 1990

5. LEASE DESIGNATION & SERIAL NO. BLM U-54224	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A	
7. UNIT AGREEMENT NAME End of the Rainbow	
8. FARM OR LEASE NAME N/A	
9. WELL NO. 21-1	
10. FIELD AND POOL, OR WILDCAT Wildcat	
11. SEC. T. R. M. OR BLK. AND SURVEY OR AREA SESW Sec. 21-T11S-R24E	
14. API NO. 43-047-31863	15. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 5547'
12. COUNTY Uintah	13. STATE Utah

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
APPROX. DATE WORK WILL START <u>5-23-90</u>		DATE OF COMPLETION _____	

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

* Must be accompanied by a cement verification report.

At this time, we do not plan to drill this well. No work, other than being staked and surveyed, has been done to this location. No reclamation necessary.

OIL AND GAS	
DRN	RJF
<input checked="" type="checkbox"/> JRB	GLH
DTS	SLS
<input checked="" type="checkbox"/> TAG	
<input checked="" type="checkbox"/> MICROFILM	
FILE	DATE
4.	5-23-90

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

SIGNED Sam Cook TITLE Technician DATE 5-23-90

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

June 14, 1990

McKenzie Petroleum Company
1625 Broadway, Suite 2580
Denver, Colorado 80202

Gentlemen:

Re: End of the Rainbow 21-1, Sec. 21, T. 11S, R. 24E, Uintah County, Utah, API No. 43-047-31863

Per your request, approval to drill the above referenced well is hereby rescinded. A new Application for Permit to Drill must be filed with this office for approval, prior to the commencement of any future work on the subject location.

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

Sincerely,

A handwritten signature in cursive script that reads "Don Staley".

Don Staley
Administrative Supervisor
Oil and Gas

DME/lcd

cc: R.J. Firth
Well file

WOI139