

UTAH OIL AND GAS CONSERVATION COMMISSION

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

DATE FILED **6-20-91** **ML-4057-1**

LAND FEE & PATENTED STATE LEASE NO **8-37794** PUBLIC LEASE NO INDIAN

DRILLING APPROVED **7-15-91**

SPOUDED IN

COMPLETED **11-2-94** **KAD** PUT TO PRODUCING **Completed**

INITIAL PRODUCTION

GRAVITY API

GOR

PRODUCING ZONES

TOTAL DEPTH

WELL ELEVATION

DATE ABANDONED **KAD 11-2-94**

FIELD **WILDCAT**

UNIT **KANE SPRINGS**

COUNTY **GRAND**

WELL NO **KANE SPRINGS STATE 36-1** API NO. **43-019-31322**

LOCATION **2498' FSL** FT FROM INT/SL LINE **2577' FWL** FT FROM (E) (W) LINE **NE SW** 1/4 - 1/4 SEC **36**

BHL: 1500' FSL **300' FEL**

TWP	RGE	SEC	OPERATOR	TWP	RGE	SEC	OPERATOR
25S	19E	36	COLUMBIA GAS DEVELOPMENT				

25S 19E 36 COLUMBIA GAS DEVELOPMENT

FACSIMILE TRANSMISSION

DATE: 5/28/91

TO: MR. FRANK MATHEWS COMPANY/LOCATION UTAH STATE TEL NO. FAX NO. 801/369-3940

FROM ALINE A. REESE COMPANY/LOCATION COLUMBIA GAS TEL NO. FAX NO. 713/871-3485

FOR MESSAGE CENTER USE: MESSAGE NUMBER DATE 5/28/91 TIME SFNT 11:05

Total Number of Pages 7 (Including cover sheet)

ANY PROBLEMS CONCERNING THIS TRANSMITTAL, PLEASE CALL: 713/871-3482

WRITE OR TYPE MESSAGE BELOW

ATTN: MR. FRANK MATHEWS
REFERENCE: COLUMBIA GAS DEVELOPMENT CORP.
NOTICE OF STAKING
WELL NAME: KANE SPRINGS STATE #36-1
SEC.36-T25S-R19E
GRAND COUNTY, UTAH

AS PER MY CONVERSATION WITH MR. BRAD HILL ON FRIDAY 5/24/91,
THE FOLLOWING IS THE NOTICE OF STAKING WITH THE SURVEYOR'S
PLAT, CUT & FILL SHEETS AND AREA TOPOG FOR YOUR REVIEW.

AN ONSITE WITH MR. HILL HAS BEEN SCHEDULED FOR THURS. MAY 30th.
IN TH P.M.

I WILL FOLLOW WITH THE HARDCOPIES IN THE MAIL.

IF YOU HAVE ANY QUESTIONS, OR REQUIRE ANY ADDITIONAL INFO.
PLEASE DO NOT HESITATE TO CALL ME AT 713/871-3482.

THANK YOU,
COLUMBIA GAS DEVELOPMENT CORPORATION

Alina A. Reese
ALINE A. REESE
REGULATORY CLERK

NOTICE OF STAKING

(Not to be used in place of Application for Permit to Drill Form 3160-3)		6. Lease Number 37794 - State of Utah	
1. Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other (Specify)		7. If Indian, Allottee or Tribe Name N/A	
2. Name of Operator: COLUMBIA GAS DEVELOPMENT CORPORATION		8. Unit Agreement Name KANE SPRINGS FEDERAL UNIT	
3. Name of Specific Contact Person: ALINE A. REESE 713/871-3400		9. Farm or Lease Name KANE SPRINGS STATE	
4. Address & Phone No. of Operator or Agent P. O. BOX 1350 HOU., TX. 77251-1350		10. Well No. #36-1	
Surface Location of Well Attach: a) Sketch showing road entry onto pad, pad dimensions, and reserve pit. b) Topographical or other acceptable map showing location, access road, and lease boundaries.		11. Field or Wildcat Name WILDCAT	
		12. Sec., T., R., M., or Blk and Survey or Area Sec. 36-T25S-R19E	
15. Formation Objective(s) CANE CREEK ZONE PARADOX	16. Estimated Well Depth 7200' TVD/9400' MD	13. County, Parish or Borough Grand	14. State UTAH
17. Additional Information (as appropriate; shall include surface owner's name, address and, if known, telephone number) 355 W. North Temple DEPT. OF NATURAL RESOURCES - 3 Triad Center Sec. #400 Salt Lake City, Utah 84180-1204			
18. Signed <u>Aline A. Reese</u> Aline A. Reese		Title <u>Regulatory Clerk</u>	Date <u>5/28/91</u>

Note: Upon receipt of this Notice, the Bureau of Land Management (BLM) will schedule the date of the onsite predrill inspection and notify you accordingly. The location must be staked and access road must be flagged prior to the onsite.

Operators must consider the following prior to the onsite:

- H₂S Potential
- Cultural Resources (Archeology)
- Federal Right-of-Way or Special Use Permit

IMPORTANT: SEE REVERSE SIDE FOR INSTRUCTIONS

ENCLOSURE
Enclosure 1

5 - 2

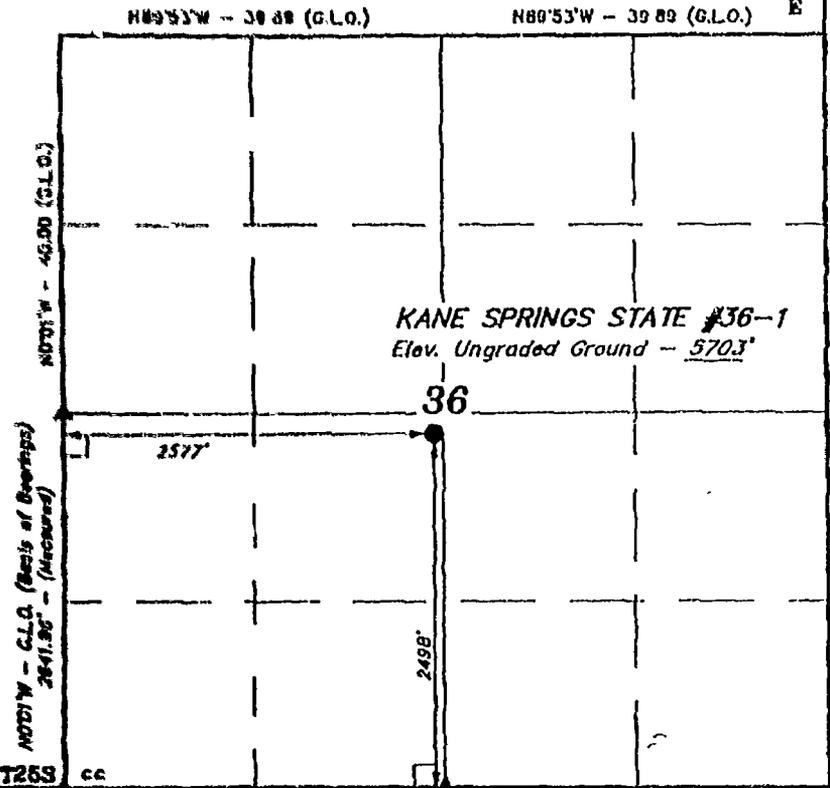
T25S, R19E, S.L.B.&M.

R
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COLUMBIA GAS DEVELOPMENT CORP.

Well location, KANE SPRINGS STATE #36-1, located as shown in the NE 1/4 SW 1/4 of Section 36, T25S, R19E, S.L.B.&M. Grand County, Utah.

APR 28 '91 10:17AM COLUMBIA GAS 713 871 2485



KANE SPRINGS STATE #36-1
Elev. Ungraded Ground - 5703'

36

2577'

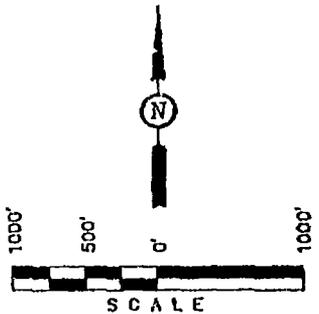
2498'

WEST - 40.00 (G.L.O.)

NORTH - 40.00 (G.L.O.)

BASIS OF ELEVATION

THE KNOLL TRIANGULATION STATION LOCATED IN SECTION 11, T26S, R19E, S.L.B.&M. TAKEN FROM THE KNOLL QUADRANGLE, UTAH, GRAND COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY, SAID ELEVATION IS MARKED AS BEING 6316 FEET.



CERTIFICATE

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

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

REVISED. 5-24-91 REH.

UNTAM ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(801) 789-1017

SCALE 1" = 1000'	DATE 5-19-91
PARTY J.T.K. D.A. B.D. K.L. REH	REFERENCES G.L.O. PLAT
WEATHER WARM	FIRE COLUMBIA GAS DEV. CORP

▲ = SECTION CORNERS LOCATED. (Brass Caps)

P.37

NOTICE OF STAKING

(Not to be used in place of Application for Permit to Drill Form 3160-3)		6. Lease Number 37794 - State of Utah	
1. Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other (Specify)		7. If Indian, Allottee or Tribe Name N/A	
2. Name of Operator: COLUMBIA GAS DEVELOPMENT CORPORATION		8. Unit Agreement Name KANE SPRINGS FEDERAL UNIT	
3. Name of Specific Contact Person: ALINE A. REESE 713/871-3400		9. Farm or Lease Name KANE SPRINGS STATE	
4. Address & Phone No. of Operator or Agent P. O. BOX 1350 HOU., TX. 77251-1350		10. Well No. #36-1	
5. Surface Location of Well 2577' FSL & 2498' FSL Attach. a) Sketch showing road entry onto pad, pad dimensions, and reserve pit. b) Topographical or other acceptable map showing location, access road, and lease boundaries.		11. Field or Wildcat Name WILDCAT	
15. Formation Objective(s) CANE CREEK ZONE PARADOX		16. Estimated Well Depth 7200' TVD/9400' MD	13. County, Parish or Borough Grand
			14. State UTAH
17. Additional Information (as appropriate, shall include surface owner's name, address and, if known, telephone number) DEPT. OF NATURAL RESOURCES - 355 W. North Temple 3 Triad Center Ste. #400 Salt Lake City, Utah 84180-1204			
18. Signed <u>Aline A. Reese</u>		Title <u>Regulatory Clerk</u> Date <u>5/28/91</u>	

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Operators must consider the following prior to the onsite:

- a) H₂S Potential
- b) Cultural Resources (Archeology)
- c) Federal Right-of-Way or Special Use Permit

RECEIVED

MAY 29 1991

DIVISION OF
OIL GAS & MINING

IMPORTANT: SEE REVERSE SIDE FOR INSTRUCTIONS

ENCLOSURE 1
Enclosure 1

5 - 2

T25S, R19E, S.L.B.&M.

COLUMBIA GAS DEVELOPMENT CORP.

Well location, KANE SPRINGS STATE #36-1, located as shown in the NE 1/4 SW 1/4 of Section 36, T25S, R19E, S.L.B.&M. Grand County, Utah.

R
1
9
E

R
1
9
E

N89°53'W - 39.89 (G.L.O.)

N89°53'W - 39.89 (G.L.O.)

N07°1'W - 40.00 (G.L.O.)

KANE SPRINGS STATE #36-1
Elev. Ungraded Ground - 5703'

36

2577'

2498'

N07°1'W - G.L.O. (Basis of Bearings)
2641.96' - (Measured)

T25S
T26S

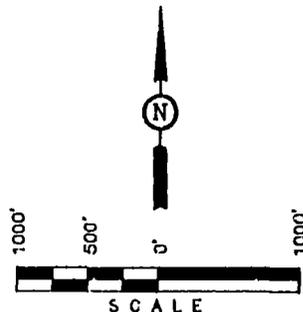
S89°59'35"E - 2635.28' (Measured)

WEST - 40.00 (G.L.O.)

G.C.
G.L.A.

BASIS OF ELEVATION

THE KNOLL TRIANGULATION STATION LOCATED IN SECTION 11, T26S, R19E, S.L.B.&M. TAKEN FROM THE KNOLL QUADRANGLE, UTAH, GRAND COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6316 FEET.



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Robert L. King
REGISTERED LAND SURVEYOR
REGISTRATION NO. 6709
STATE OF UTAH

REVISED. 5-24-91 R.E.H.

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(801) 789-1017

SCALE 1" = 1000'	DATE 5-19-91
PARTY J.T.K. D.A. B.D. K.L. R.E.H.	REFERENCES G.L.O. PLAT
WEATHER WARM	FILE COLUMBIA GAS DEV. CORP.

▲ = SECTION CORNERS LOCATED. (Brass Caps)

COLUMBIA GAS
Development



June 19, 1991

VIA AIRBORNE EXPRESS

STATE OF UTAH NATURAL RESOURCES OIL, GAS &
MINING
355 W. NORTH TEMPLE, 3 TRIAD CENTER, STE.#350
SALT LAKE CITY, UTAH 84180-1203

Attention: Mr. R. J. Firth

Reference: **COLUMBIA GAS DEVELOPMENT CORPORATION**
KANE SPRINGS STATE #36-1
SEC.36-T258-R19E S.L.B&M
GRAND COUNTY, UTAH

Dear Mr. Firth:

Columbia Gas Development Corporation respectfully submits the enclosed Application for Permit to Drill, in triplicate, with the following attachments for processing:

1. Eight Point Drilling Program
2. Multi-Point Surface Use Plan
3. BOPE Diagram
4. Certified surveyor's plat, cut & fill sheet and area topog.
5. Letter of certification
6. Bond information.

If you have any questions, or require any additional information, please do not hesitate to contact me at 713/871-3482.

Sincerely,

COLUMBIA GAS DEVELOPMENT CORPORATION

Aline A. Reese
Regulatory Clerk

AAR
Encl.

CONFIDENTIAL

RECEIVED

JUN 20 1991

DIVISION OF
OIL GAS & MINING

CC: BUREAU OF LAND MANAGEMENT
MOAB DISTRICT OFFICE - BRANCH OF FLUID MINERALS

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

(Other instructions on reverse side)

ML-40571
5 Lease Designation and Serial No
State of Utah 37794

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 Horizontal Single Zone Multiple Zone

2 Name of Operator
Columbia Gas Development Corporation

3 Address of Operator
P. O. Box 1350 Hou., TX. 77251-1350

4 Location of Well (Report location clearly and in accordance with any State requirements*)
At surface 2499' FSL & 2577' FWL of Sec.36-T25S-R19E NE5/8
At proposed prod zone 150' FSL & 900' FEL of Sec.36-T25S-R19E

14 Distance in miles and direction from nearest town or post office*
Approx. 12 air miles west of Moab, Utah

16 Distance from proposed location to nearest property or lease line, ft (Also to nearest dril. line if any) 640 acres
18 Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease. ft N/A

19 Proposed depth 7602 TYP/10370 MD
20 Rotary or cable tools Rotary

21 Elevations (Show whether DF, RT, GR, etc.)
Ground 5703'
22 Approx. date work will start*
end of July 1991

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
Set	20"	94#	180'	To Sfc. w/175 sx Cl-B
17 1/2	13 3/8"	61# K-55	4000'	265 sx Lite & 415 sx Cl-B
12 1/4	9 5/8"	53# S-95	7730'	1745 sx Cl-G
	5 1/2"	20# S-95	10370'	(production liner)

CONFIDENTIAL

RECEIVED

See attached for supplemental info.:

1. Eight Point Drilling Program
2. Multi-Point Surface Use Plan
3. BOPE Diagram
4. Certified surveyor's plat, cut & fill topog.
5. Letter of Certification
6. Bond info.

JUN 20 1991

DIVISION OF
OIL GAS & MINING

TECHNICAL REVIEW
Engr. JAM 2/15/91
Geol. [Signature]
Surface [Signature]

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

Signed Alvin A. Reese Title Regulatory Clerk Date 6/18/91

Permit No 43-019-31300 Approval Date _____

Approved by _____ Title _____ DATE: 7/15/91

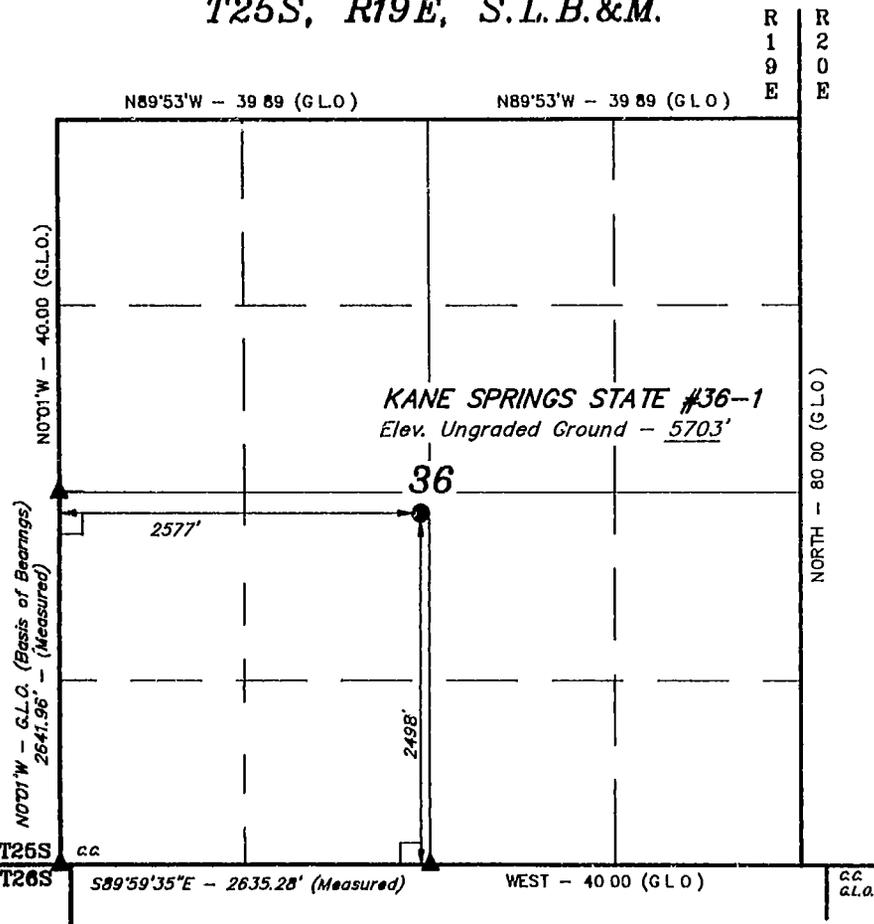
APPROVED BY THE STATE
OF UTAH, DIVISION OF
OIL, GAS, AND MINING
DATE: 7/15/91
BY: [Signature]
WELL SPACING: 615-2-3

*See Instructions On Reverse Side

T25S, R19E, S.L.B.&M.

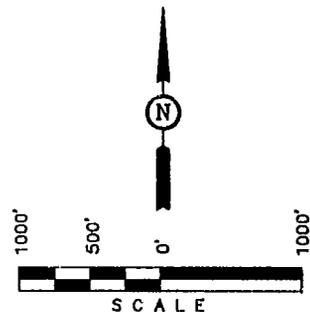
COLUMBIA GAS DEVELOPMENT CORP.

Well location, KANE SPRINGS STATE #36-1, located as shown in the NE 1/4 SW 1/4 of Section 36, T25S, R19E, S.L.B.&M. Grand County, Utah.



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PARTY J.T.K. D.A. B.D. K.L. R.E.H.	REFERENCES G.L.O. PLAT
WEATHER WARM	FILE COLUMBIA GAS DEV. CORP.

EIGHT-POINT DRILLING PROGRAM

COMPANY: COLUMBIA GAS DEVELOPMENT CORPORATION

WELL NAME: KANE SPRINGS STATE #36-1

LOCATION: SEC.36-T25S-R19E S.L.B.&M
GRAND COUNTY, UTAH

ONSITE INSPECTION DATE: Thursday May 30th., 1991

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulation (43 CFR 3100), Onshore Oil & Gas Order No.1, and the approved plan of operations. A copy of these conditions will be furnished to the field representative to insure compliance.

A. DRILLING PROGRAM

1. Estimated Geologic Markers

Formation Tops	Depth	Subsea	RKB=26
Wingate	Surface	+5727	
Chinle	127	+5600	
Moenkopi	497	+5230	
Cutler	927	+4800	
Rico	1697	+4030	
Hermosa	2157	+3570	
Paradox Salt	3902	+1825	
Cane Creek	7577	-1850	

2. Estimated Depths of Anticipated Water, Oil, Gas or Other Minerals

Formation Tops	Depth	Subsea	Remarks
Wingate	Surface	+5576	Fresh water
Cane Creek	7577	-1850	Oil

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected.

3. Operator's Minimum Specification for Pressure Control Equipment

The Utah State Office and the Moab District Office shall be notified, with sufficient lead time, in order to have an authorized representative on location during pressure testing of BOPE.

A rotating head and blooey line will be rigged up on the conductor and surface pipe. See Exhibit C-1.

One (1) 2000 psi annular bag-type preventer will be utilized while drilling the surface hole.

One (1) 5000 psi annular bag-type and three (3) 5000 psi ram-type preventers will be utilized while drilling below the intermediate pipe. Ram preventers are to be tested to seventy percent (70%) of working pressure, or seventy percent (70%) of burst rating of intermediate pipe, whichever is less. Annular preventer is to be tested to fifty percent (50%) of working pressure - See exhibits C-2.

Choke Manifold will meet or exceed the requirements of the typical 5M manifold as in Onshore Order #2. See Exhibit C-3.

All BOPE and testing procedures will be consistent with API RP-53 and will be conducted before drilling out casing shoe. Preventers will be inspected and operated at least once daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report.

4. Casing Program and Auxiliary Equipment

The Utah State Office and the Moab District Office shall be notified, with sufficient lead time, in order to have an authorized representative on location while running all casing strings and cementing.

Surface pipe:

INTERVAL	SIZE	WT	GR	CONN	BURST/BF	COL/BF	TENSION/BF
0-180'	20"	94#	H40	STC	1530/13.0	520/6.3	581M/34.0

Set 50' into the Chinle. Cemented to Surface with 175sx Class B.

Intermediate Pipe:

INTERVAL	SIZE	WT	GR	CONN	BURST/BF	COL/BF
0-4000'	13-3/8"	61#	K55	STC	3090/1.28	1540/1.75

TENSION/BF
633M/2.30

Cemented with 265sx lightweight plus 415sx Class B, with estimated top of cement at 3000'. Pressure test to 2160 psi before drilling out shoe.

Collapse design based on .22 psi/ft gradient. Burst design based on shoe test of 13.5 ppg less .1 psi/ft gradient.

Production Pipe:

INTERVAL	SIZE	WT	GR	CONN	BURST/BF	COL/BF
0-7730'	9-5/8"	53	S95	ITC	9410/1.86	8850/1.16
						TENSION/BF 1235M/2.28

Cement w/1400 sx Class "G", with estimated top of cement at 3800'. Pressure test to 5000 psi before drilling out shoe.

Collapse design based on 1.0 psi/ft overburden gradient. Burst based on max. mud weight in offset wells (17.0 ppg) less .22 psi/ft oil gradient.

Production Liner:

INTERVAL	SIZE	WT	GR	CONN	BURST/BF	COL/BF
7680-10370	5-1/2	20	S95	BTC	10680/NA	10680/1.43
						TENSION/BF 554M/9.02

Bottom 2640' to be pre-drilled with 3/4" holes, 3' apart at 90 degree phase.

An isolation packer will be run on top of the liner.

Collapse design based on max. mud weight in offset wells (17.0 ppg).

Auxilliary Equipment:

- A. A Kelly cock will be kept in the string at all times.
- B. A stabbing valve will be kept on the derrick floor at all times.
- C. A float will not be used, other than when air drilling.

5. Proposed Mud Program

No chromates will be used in the well.

DEPTH	MUD WT	VIS	PV	YP	WL	TYPE MUD
0-180'	---	---	---	---	---	Air/Mist
180-4000'	---	---	---	---	---	Air/Mist
4000-7550	TVD 9.6	42-46	18	21	<10	Oil Base
7550-7582	TVD 9.6-12.5	42-46	18	21	<10	Oil Base
7582-7602	TVD 16.5	54-57	35	21	<4	Oil Base

6. Coring, Logging & Testing Program

- A. Drill Stem Tests: None planned.
- B. Well Logging & Intervals:

LOG	INTERVAL
Induction/Sonic/GR	4000-7172 TVD
MWD-Induction/GR	will be attempted in the horizontal section (7172-10370MD, 7602 TVD)

- C. Cores: A 30' oriented core will be attempted in the Cane Creek formation.
- D. Directional Surveys: This well as proposed will be drilled vertically to 7172' and then drilled as a medium radius horizontal well in the direction of S 37 E for a total displacement of 2954'. Inclination tests will be taken at 500' and 1000' max. intervals until KOP. At KOP a multi-shot will be taken. During the angle build portion, surveys will be taken at 90' maximum intervals. During the horizontal portion of the hole, surveys will be taken at 200' maximum intervals.
- E. Samples: samples will be taken at 10' intervals from 4000' to TD.
- F. There will be a mud logger on location from 4000' (below intermediate pipe) to TD.
- G. Completion Procedure: To be submitted on Form 5 under "Approval of Subsequent Operations."

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion

of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations will be filed with Form 3160-4.

7. Anticipated Abnormal Pressures, Temperatures or Potential Hazards

A. Abnormal pressure is anticipated in the Cane Creek formation. The proposed casing program and pressure control equipment has been designed based on the anticipated abnormal pressures of the Cane Creek formation.

B. Hydrogen Sulfide is not anticipated.

8. Notification of Operations & Other Information

A. Construction of Location is scheduled to start on July 26, 1991.

B. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from well to be placed in a suspended status without prior approval of the AO.

C. Spud date is scheduled for August 2, 1991. The spud date will be reported orally to the AO within 48 hours after spudding. If the spudding occurs on a weekend or a holiday, the report will be submitted on the following regular work day. The oral report will be followed up with a Sundry Notice.

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

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

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Notification will be made no later than five (5) days following the date on which the well is placed on production.

Venting/Flaring of gas during initial well evaluation tests will not exceed a period of thirty days or the production of

50 MCF of gas, whichever occurs first. An application will be filed with the District Engineer and approval received, for any Venting or Flaring beyond the initial 30 day authorized test period.

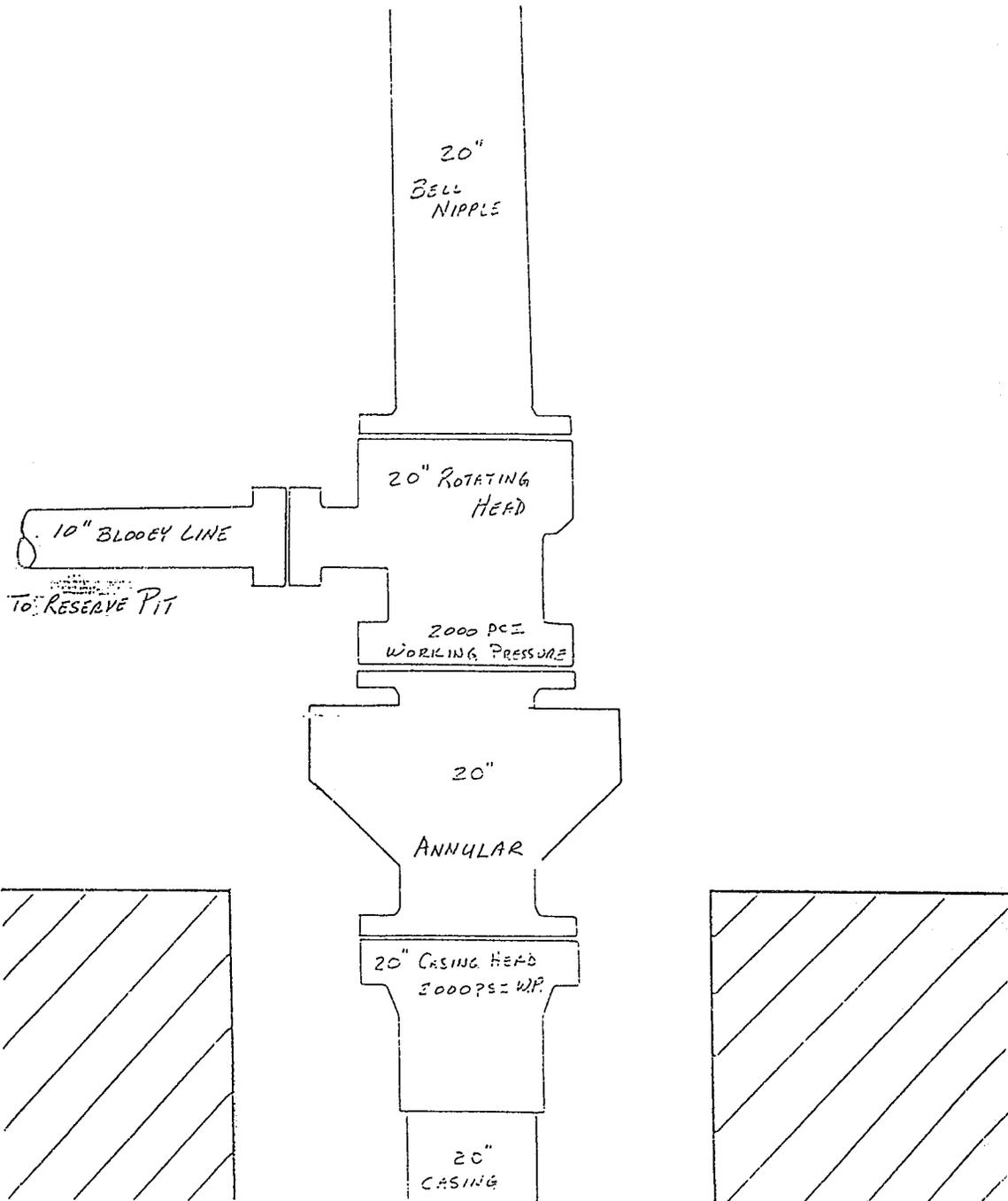
Wee abandonment operations will commence only after prior approval has been received from the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" will be filed with the AO within 30 days following completion of the well for abandonment operations.

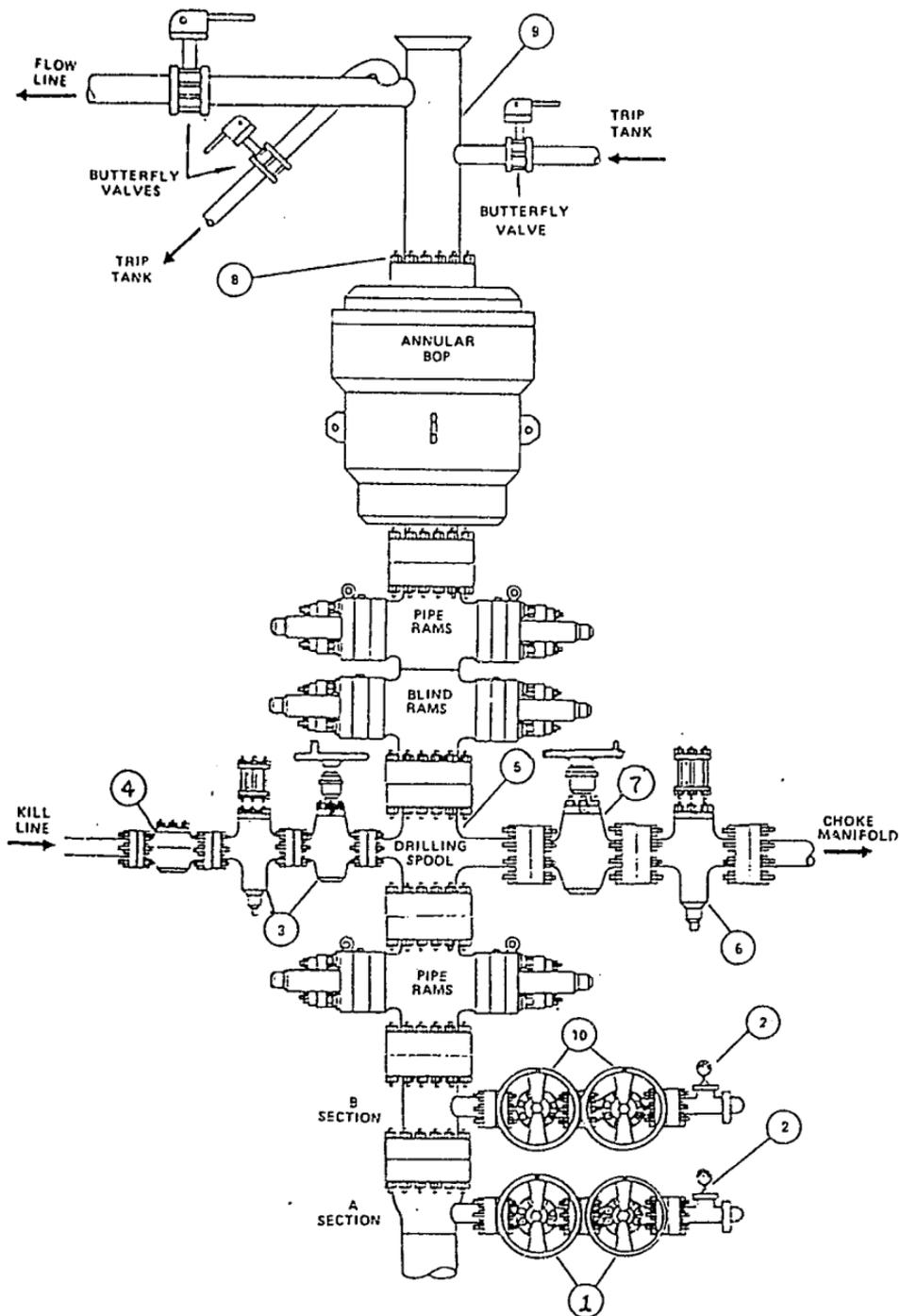
There will be no deviation from the proposed drilling and/or workover program without prior approval of the AO. Safe drilling and operating practices will be observed.

This well, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

- EXHIBIT C-1





OFFSHORE LOUISIANA

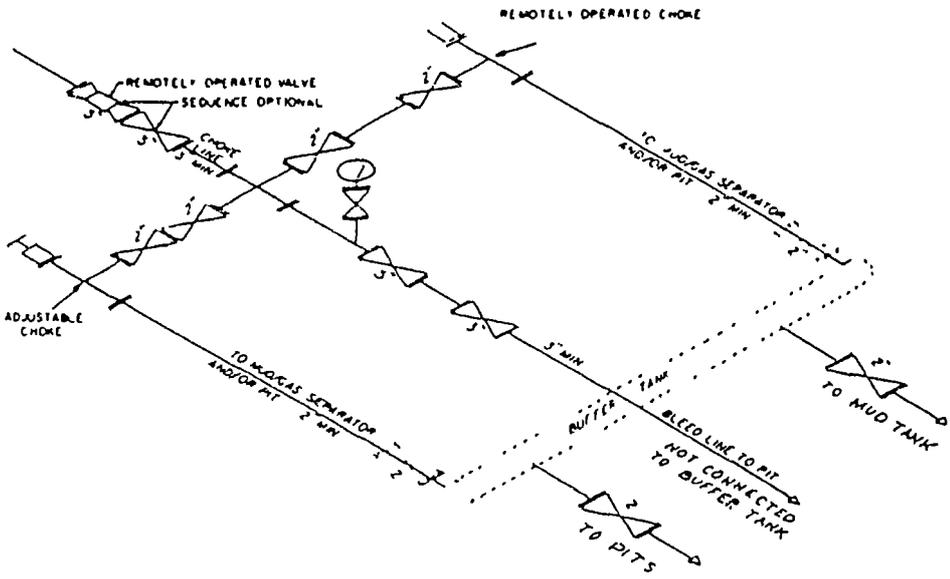
COMPONENT SPECIFICATIONS

- 1 Screwed or flanged plug or gate valves — 2" minimum nominal dia — same working pressure as "A" section
- 2 Tee with tapped bullplug, needle valve, and pressure gauge
- 3 Flanged plug or gate valve — 2" minimum nominal dia — same working pressure as BOP stack Second valve up stream may be hydraulically controlled.
- 4 Flanged flapper type check valve — 2" minimum nominal dia — same working pressure as BOP stack
5. Drilling spool of sufficient height to allow stripping with 2 flanged side outlets — 3" choke and 2" kill line minimum nominal dia (See Table II-4 and Note D)
- 6 Flanged hydraulically controlled gate valve — 3" minimum nominal dia — same working pressure as BOP stack (See Note D)
7. Flanged plug or gate valve — 3" minimum nominal dia — same working pressure as BOP stack
- 8 Top of annular preventer must be equipped with an API flange ring gasket All flange studs must be in place or holes filled in with screw type plugs
- 9 The I D of the bell nipple must not be less than the minimum I D of the BOP stack
- 10 Flanged plug or gate valve — 2" minimum nominal dia — same working pressure as "B" section

NOTE:

The choke line between the drilling spool and choke manifold should not contain any bend or turn in the pipe body. Any bend or turn required should be made with a running tee with a blind flange or welded bullplug All connections should be flanged or welded All fabrications requiring welding must be done by a certified welder Welds should be stress relieved when required

Plug valves should be equivalent to the Howco Lo-Torc and gate valves equivalent to the Cameron Type 'F'



5M CHOKE MANIFOLD EQUIPMENT — CO

Although not required for any of the choke manifold sometimes installed downstream of the choke are some manifold the bleed lines together. When buffer shall be installed upstream to isolate a failure a tubing flow control. Though not shown on 2M, it would also be applicable to those situations.

[FR Dec. 06-2873E Filed 11-17-88; 2:45 a.m.]
 BILLING CODE 4910-04-C

CONDITIONS OF APPROVAL
FOR THE SURFACE USE PROGRAM OF THE
APPLICATION FOR PERMIT TO DRILL

COMPANY : Columbia Gas Development Corporation
WELL NAME & NUMBER: Kane Springs State #36-1
LEASE NO.: State of Utah - 37794
LOCATION: 2577' FWL & 2498' FSL of Sec.36
T25S-R19E S.L.B&M
SURFACE OWNERSHIP: State of Utah Dept. of Natural
Resources

STATE NOTIFICATION REQUIREMENTS

Notify R. J. Firth of the State of Utah Natural Resources Oil, Gas & Mining Office, at (801) 538-5340 for the following:

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

1 day prior to spudding;

1 day prior to pressure testing of surface casing.

No well abandonment operations will be commenced without the prior approval of the State Office. In the case of newly drilled dry holes and in emergency situations, verbal approval can be obtained by calling Mr. R. J. Firth at (801) 538-5340

Jimmy Thompson, Lead Oil & Gas Inspector

Ofc. (801) 538-5430

Home: (801) 298-9318

R. J. Firth, Asst. Director

Ofc. (801) 538-5430

24 HOUR ADVANCE NOTICE IS REQUIRED FOR ALL ABANDONMENTS.

BLM NOTIFICATION REQUIREMENTS

Notify Elmer Duncan of the Grand Resource Area, at (801)259-8193 for the following:

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

1 day prior to spudding;

1 day prior to running and cementing surface casing;

1 day prior to pressure testing of surface casing.

Notify the Moab District Office, Branch of Fluid Minerals at (801)259-6111 for the following:

No well abandonment operations will be commenced without the prior approval of the Assistant District Manager, Minerals Division. In the case of newly drilled dry holes, and in emergency situations, verbal approval can be obtained by calling the following individuals, in the order listed.

Dale Manchester, Petroleum Engineer Office: (801)259-6111
Home: (801)259-6239

Eric Jones, Petroleum Engineer Office: (801)259-6111
Home: (801)259-2214

If unable to reach the above individuals including weekends, holidays or after hours please call the following:

Lynn Jackson,
Chief, Branch of Fluid Minerals Office: (801)259-6111
Home: (801)259-7990

24 HOURS ADVANCE NOTICE IS REQUIRED FOR ALL ABANDONMENTS

ONSITE DATE: Thursday May 30th., 1991

THIRTEEN POINT SURFACE USE PROGRAM

MULTIPOINT REQUIREMENTS TO ACCOMPANY APD

1. EXISTING ROADS

A. Existing road and location in relation to location submitted on Exhibit "A".

B. From Moab, Utah:

Travel North approx. 11 miles on 191. Turn left onto Hwy 313 and travel for approx. 12 miles. Turn left onto existing trail and travel 1.7 miles. Turn left onto proposed access for approx. 50' to location.

C. Description of roads in area: All weather asphalt & two wheel jeep roads.

2. PLANNED ACCESS ROADS

A. Length: Approx. 50' of proposed access and 1.7 miles existing dirt road.

B. Width: 18' Running surface

C. Maximum Grades: N/A

D. Turnouts: None anticipated

E. Drainage Design: There will be minimum disturbance during drilling phase. If the well is a producer upgrading will be done as required.

F. Location and size of culverts and/or bridges, and brief description of any major cuts and fills: None

G. Surface Material Source: Native materials

H. Necessary gates, cattleguards, or fence cuts and/or modification to existing facilities:

All travel will be confined to existing access road.

I. Notification will be given to the State of Utah Ofc. of Natural Resources and the Bureau of Land Management, District Office, with sufficient lead time, prior to

the construction of access road, and drill pad.

- J. Columbia Gas Development Corporation will provide Dirt Contractor with necessary maps, pad and road construction plans.

3. LOCATION OF EXISTING WELL

Within a one mile radius of this proposed well there are no known:

Water wells, abandoned wells, disposal wells, injection wells, monitoring wells or drilling wells.

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

Notification will be given to the State of Utah Dept. of Natural Resources and the Bureau of Land Management, District Office, with sufficient lead time, prior to construction of production facilities.

- A. If well is productive, new on-well pad facilities and lines will be submitted as "as built" under the following guidelines:
1. Tank battery and/or location will be surrounded by a dike of sufficient capacity to contain the contents of the largest vessel within the dike plus one day's production.
 2. Facilities will be placed in cut as much as possible.
 3. A wind-sock will be placed on the Tank battery so it is visible from all parts of the location.
 4. All internal combustion engines associated with production facilities will be equipped with noise reducing mufflers.
 5. All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat non-reflective, earthtone color to match one of the standard environmental colors as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with O.S.H.A. will be excluded.
 6. Fire prevention and suppression requirements for operations will be followed as per State of Utah and Bureau

of Land Management guidelines.

7. No permanent above ground pipelines will be installed between the wellhead and treater or between the treater and flare pit.
8. All spills (production water or oil) or pipeline breaks outside the diked area will be reported within the 24 hours to the State and BLM District offices.

5. LOCATION AND TYPE OF WATER SUPPLY

The necessary permits will be obtained by the operator from the appropriate State Water Rights Division office for the use of water at the drillsite.

Fresh water & salt water will be trucked by a local trucking company.

6. SOURCE OF CONSTRUCTION MATERIALS

No construction materials will be used other than native materials. Soil from cuts will be used in fills. No outside materials will be brought in.

7. METHODS FOR HANDLING WASTE DISPOSAL

A. Methods and location of proposed safe containment and disposal of each type of waste material:

1. Cuttings will be deposited in the reserve pit.
2. Drilling fluids will be confined to mud tanks and reserve pit if necessary. At rig release, mud will be returned to supplier for storage.
3. Produced Water: While testing the well, all produced water will be contained in a storage tank. If well is a producer, a saltwater storage tank will be installed with tank battery.
4. Sewage will be disposed of according to county and state requirements in a portable chemical toilet or in a hole at least 15 deep excavated in the cut portion of the well pad.
5. Portable dumpsters will be used for all trash. All trash will be hauled offsite.

B. The Reserve pit shall be constructed so as not to leak, break, or allow discharge. The Reserve pit shall not

be lined unless post construction inspection indicates a need to do so.

- C. After first production, produced waste water will be confined to a lined pit or storage tank for a period not to exceed ninety (90) days. During the ninety day period, in accordance with NTL-2B, an application for approval of permanent disposal method and location, along with required water analysis, shall be submitted for the authorized officer's approval.

8. ANCILLARY FACILITIES

No camp, airstrip or other facility will be built during the drilling of this well.

9. WELL SITE LAYOUT

A. See attachment for the Well Site Layout showing the following: Substructure, Engine, Mud pumps, Mud tanks, Diesel tank, Water Tank, Boiler, Light plant, Dog house, Bunk house, Pipe racks, Catwalk, Choke manifold, Accumulator, Derrick stand, Wireline, Mud mixer, Change house, Trailers, Trash bin, parts house, Mud manifold, Mud storage, Desander/Desilter, Winterizing or parts tub.

Also attached is a cross section diagram showing cuts & fills in relation to existing topography.

The location will be constructed large enough to accommodate the drilling rig and associated equipment with allowance made for future completion and production equipment.

No topsoil stripping will be done when soils are moisture saturated to a depth of 3 inches, or frozen below stripping depth.

B. Fencing requirements - All pits will be fenced according to the following minimum standards:

1. 30-inch net wire shall be used with at least one strand of barbed wire on top of the net wire.
2. The net wire shall be no more than 2-inches above the ground. The barbed wire shall be 3-inches above the net wire. Total height of fence shall be 42-inches.
3. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

4. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
5. All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until clean-up.

10. PLANS FOR RESTORATION OF SURFACE

A. Production location

1. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.
2. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with State & Federal regulations.
3. The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within ninety (90) days from the date of well completion. Before any dirt work takes place, the reserve pit must be completely dry and all cans, barrels, pipe, etc., will be removed.
4. Seed mixtures to be used in rehabilitation will be provided by the State Office. Seed mixtures will be certified weed free and seeding will be accomplished during the spring or fall. Seed tags will be submitted to the area manager within 30 days of seeding.
5. Site rehabilitation will be completed within six (6) months, weather permitting. Before any production facilities are constructed, a site reclamation plan will be submitted to the District Office for all areas not required for production facilities.

B. Dry Hole/Abandoned Location

1. At such time as well is plugged and abandoned,

the operator shall submit a subsequent report of abandonment to both the Utah State Ofc. and the Bureau of Land Management.

2. The location will be rehabilitated within six (6) months, weather permitting, from the date the well is plugged.

11. SURFACE OWNERSHIP

Surface location and access roads are owned by the State of Utah - Dept. of Natural Resources
355 W. North Temple, 3 Triad Centre, Ste.#350
Salt Lake City, Utah 84180-1204

12. OTHER INFORMATION

- A. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archeological sites, or for collecting artifacts. If historic or archeological materials are uncovered during construction, the operator will immediately stop work that further disturb such materials, and contact the authorized officer. Columbia Gas Development Corporation will comply with the requirements set forth by the BLM Surface Use Stipulations.
- B. Columbia Gas Development Corporation has a One Hundred and Fifty Thousand (150,000) dollar Nationwide Bond - copy attached.
- C. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on State or Federal Lands after the conclusion of drilling operations or at any other time without authorization. However, if authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.
- D. There will be no deviation from the proposed drilling program without prior approval.
- E. Sundry Notice & Report on wells will be filed for approval of all changes of plans and other operations.
- F. Dirt Contractor will be provided with an approved copy of the Surface Use plan.

drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

- D. There will be no deviation from the proposed drilling program without prior approval from the District.
- E. Sundry Notice & Report on wells (Form 3160-5) will be filed for approval of all changes of plans and other operations in accordance with 43 CFR 3164.
- F. Dirt Contractor will be provided with an approved copy of the Surface Use plan.
- G. Environmental Impacts.
 - 1. Setting is approximately 15 air miles west of Moab, Utah, 8.5 miles NW of Deadhorse Point State Park, and 7 miles North of Canyonlands National Park.
 - 2. Surface disturbance will be approximately 2.1 acres during the drilling phase and approximately 2.0 acres in the completion/production phase. The affected area has an estimated vegetation coverage of 5-10%. The topsoil will be replaced during abandonment procedures and reseeded. Surface impact will be temporary with no residual impacts. The surface area was moved as a result of the onsite meeting to reduce the amount of surface disturbance.
 - 3. Visual impacts will be limited to the drilling phase. The top section of the derrick will be visible from Hwy 313 for approx. 50 days.
 - 4. Audible impacts will be the greatest during the drilling and completion phases. Engine noise will be noticeable up to 3/4 mile during the drilling operations (estimated 50 days) and a 1/4 mile during the completion operations (estimated 10 days).
 - 5. Particulate impacts will be temporary and local if dry soil conditions exist during construction and heavy traffic periods. Fugitive dust will be controlled by watering the road as necessary during pad construction and periods of heavy traffic.

13. LESSEE'S OR OPERATOR REPRESENTATIVE AND CERTIFICATION

Columbia Gas Development Corporation
P. O. Box 1350
Houston, Texas 77251-1350
713/871-3400

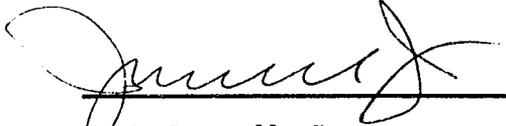
All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors.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

Certification

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

DATE

6/19/91



J. C. Braswell, Jr.
Director of Drilling



May 17, 1991

BUREAU OF LAND MANAGEMENT
Grand Resource Area Office
88 S. Sand Flats Road
Moab, Utah 84532

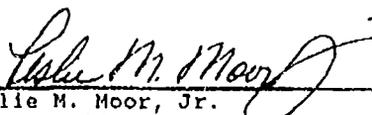
RE: COLUMBIA GAS DEVELOPMENT CORPORATION
LETTER OF CERTIFICATION

Columbia Gas Development Corporation hereby certifies that it is
the operator of the following wells:

Kane Springs Federal #28-1
Kane Springs Federal #14-1
Kane Springs Federal #20-1
Kane Springs Federal #10-1

Columbia Gas Development Corporation shall be responsible for
complying with the terms and conditions of the lease for all the
operations conducted on the leased land.

Signed this 17th day of May, 1991.



Leslie M. Moor, Jr.
Vice President, Drilling & Production



United States Department of the Interior JUN 30 1989

RECEIVED
IN REPLY REFER TO

BUREAU OF LAND MANAGEMENT
COLORADO STATE OFFICE
2850 YOUNGFIELD STREET
LAKEWOOD COLORADO 80215

JUN 30 1989
CO-921A (JAS)
3104
BLM Bond No.:
CO-0356

JUN 27 1989

DECISION

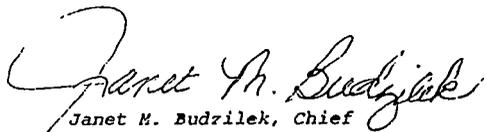
Principal: Columbia Gas Development Corp. Surety ID No.: U-391050-16RR
P.O. Box 1350
Houston, TX 77251-1350 Amount: \$150,000

Surety: United Pacific Insurance Co. Type: Nationwide Oil & Gas Bond

Agent: Charles W. Blank Type Rider: Operator
United Pacific Insurance Co.
34405 Eight Ave. South C-3000 Date Rider Executed: May 15, 1989
Federal Way, WA 98005

Bond Rider Accepted

A rider to the above identified bond has been filed in this office. The rider extends coverage to leases where the principal is operator. The rider has been examined and found satisfactory. It is accepted effective June 2, 1989.


Janet M. Budzilek, Chief
Fluid Minerals Adjudication Section



May 18, 1989

U.S. Department of the Interior
Bureau of Land Management
2020 Arapahoe Street
Denver, CO 80205

RECEIVED
JUN 15 1989

GENERAL ACCOUNTING

RE: Columbia Gas Development Corporation
Nationwide Oil and Gas Bond
BLM Bond No. CO-0356
Surety Bond Number U-391050-16RR
New Bond Number U391414-46

Gentlemen:

Enclosed is a rider to provide coverage of Bond No. U-391050-16RR where Columbia Gas Development Corporation is the operator.

Please acknowledge your acceptance by signing where indicated on the attached copy of this letter and returning in the enclosed self-addressed stamped envelope.

Should you have any questions, please contact me at (713) 787-3412.

Very truly yours,

[Handwritten signature]
John A. Wyatt
Risk Management

Received By *[Signature]*
Name
6/12/89
Date

*Acceptance letter will follow,
if appropriate*

63 JUN -2 10:00

BLM Bond Number: CO-0356
Surety Bond Number: U-391050-16RR

RIDER

In consideration for the payment of any additional premium charged for this rider and the acceptance of this rider by the Bureau of Land Management on behalf of the United States of America, the undersigned principal and surety hereby extend the coverage of Bond No. U-391050-16RR, to all of the leases where the principal is the operator, whether or not the principal owns an interest in those leases. The principal hereby agrees to be bound by all the terms and conditions of any lease wherein the principal is the operator until all the terms and conditions of the lease have been satisfied, including the payment of any rentals and royalties due; provided, however, that this rider shall not act to increase the actual cumulative or potential liability of the surety above the face amount of the bond, ^{One Hundred Fifty} ~~Thousand~~ and 00/100 Dollars (\$ 150,000.00); providing, further, however, that any limitation of liability on the part of the surety shall not apply to the principal who shall be liable to the same extent as the lessee.

Columbia Gas Development Corporation

By: [Signature]
Principal and Title

[Signature]
Witness and Address
Ann G. Berger
3523 Point Clear Drive, Missouri City, TX

United Pacific Insurance Company

By: [Signature]
Surety
Charles W. Blank, Attorney-in-Fact

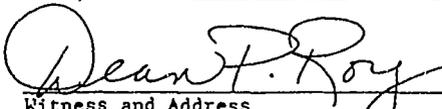
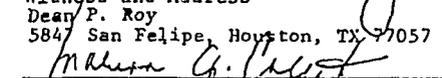
[Signature]
Witness and Address
Marion G. Collett
100 Light Street
Baltimore, Maryland 21202

last document, best
copy. Page is slightly
blurred.

RIDER DESIGNED TO EXTEND STATEWIDE OR NATIONWIDE BONDS TO INCLUDE LEASES WHERE THE PRINCIPAL IS A DESIGNATED OPERATOR

In consideration for the payment of any additional premium charged for this rider and the acceptance of this rider by the Bureau of Land Management on behalf of the United States of America, the undersigned Principal and Surety hereby extend the coverage of Bond No. U-391050-16RR, to all of the leases where the Principal has been designated as the operator by the lessee(s) or holder(s) of the operation rights and the Principal hereby agrees to be bound by all the terms and conditions of any lease wherein the Principal is designated as operator and files such designation with an appropriate officer of the Bureau, whether or not the designation is subsequently revoked, until all the terms and conditions of the lease(s) have been satisfied, including the payment of any rentals and royalties due and the proper plugging and abandonment of any wells drilled on such lease(s); provided, however, that this rider shall not act to increase the actual cumulative or potential liability of the Surety above the face amount of the bond, to wit: One Hundred Fifty Thousand and 00/100 Dollars (\$ 150,000.00); provided, further, however, that any limitation of liability on the part of the Surety shall not apply to the Principal who shall be liable to the same extent as the party or parties designating the Principal as Operator.

Executed this 14th day of April, 1987.


Witness and Address
Dean P. Roy
5847 San Felipe, Houston, TX 77057

Witness and Address
Marion G. Collett
100 Light Street, Balto., Md. 21202

Columbia Gas Development Corporation
By: 
Principal; John P. Bornman, Jr., President
United Pacific Insurance Company
By: 
Surety
Stephen R. Mummert, Attorney-in-Fact

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, That the UNITED PACIFIC INSURANCE COMPANY, a corporation duly organized under the laws of the State of Washington, does hereby make, constitute and appoint Wilbur M. Priester, S. J. Sandbank, F. S. Carnes, Jr., Stephen R. Mummert, Robert F. White, Charles W. Blank and Mary Ellen Pease, individually, of Baltimore, Maryland

its true and lawful Attorney-in-Fact, to make, execute, seal and deliver for and on its behalf, and as its act and deed any and all bonds and undertakings of Suretyship,

and to bind the UNITED PACIFIC INSURANCE COMPANY thereby as fully and to the same extent as if such bonds and undertakings and other writings obligatory in the nature thereof were signed by an Executive Officer of the UNITED PACIFIC INSURANCE COMPANY and sealed and attested by one other of such officers, and hereby ratifies and confirms all that its said Attorney(s)-in-Fact may do in pursuance hereof.

The Power of Attorney is granted under and by authority of Article VII of the By-Laws of UNITED PACIFIC INSURANCE COMPANY which became effective September 7, 1978, which provisions are now in full force and effect, reading as follows:

ARTICLE VII — EXECUTION OF BONDS AND UNDERTAKINGS

1. The Board of Directors, the President, the Chairman of the Board, any Senior Vice President, any Vice President or Assistant Vice President or other officer designated by the Board of Directors shall have power and authority to (a) appoint Attorneys-in-Fact and to authorize them to execute on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, and (b) to remove any such Attorney-in-Fact at any time and revoke the power and authority given to him.

2. Attorneys-in-Fact shall have power and authority, subject to the terms and limitations of the power of attorney issued to them, to execute and deliver on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof. The corporate seal is not necessary for the validity of any bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof.

3. Attorneys-in-Fact shall have power and authority to execute affidavits required to be attached to bonds, recognizances, contracts of indemnity or other conditional or obligatory undertakings and they shall also have power and authority to certify the financial statement of the Company and to copies of the By-Laws of the Company or any article or section thereof.

The power of attorney is signed and sealed by facsimile under and by authority of the following Resolution adopted by the Board of Directors of UNITED PACIFIC INSURANCE COMPANY at a meeting held on the 5th day of June, 1978, at which a quorum was present, and said Resolution has not been amended or repealed:

"Resolved, that the signature of such directors and officers and the seal of the Company may be affixed to any such power of attorney or any certificate relating thereto by facsimile, and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached."

IN WITNESS WHEREOF, the UNITED PACIFIC INSURANCE COMPANY has caused these presents to be signed by its Vice President, and its corporate seal to be hereto affixed, this 14th day of May 1987.

UNITED PACIFIC INSURANCE COMPANY

Vice President



STATE OF Pennsylvania ss. COUNTY OF Philadelphia

On this 14th day of May, 1987, personally appeared Raymond MacNeil

to me known to be the Vice-President of the UNITED PACIFIC INSURANCE COMPANY, and acknowledged that he executed and attested the foregoing instrument and affixed the seal of said corporation thereto, and that Article VII, Section 1, 2, and 3 of the By-Laws of said company and the Resolution, set forth therein, are still in full force.

My Commission Expires:

September 28, 1987

[Signature of Notary Public]

Notary Public in and for State of Pennsylvania

Residing at



I, Ray L. Lorah, Assistant Secretary of the UNITED PACIFIC INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by UNITED PACIFIC INSURANCE COMPANY, which is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Company this 15th day of May 1987.

Assistant Secretary



UNITED PACIFIC INSURANCE COMPANY

HOME OFFICE FEDERAL WAY, WASHINGTON

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, That the UNITED PACIFIC INSURANCE COMPANY, a corporation duly organized under the laws of the State of Washington, does hereby make, constitute and appoint Wilbur M. Priester, S. J. Sandbank, F. S. Carnes, Jr., John V. Vasco, Gordon H. Prager, Stephen R. Murnert, Anna R. Daily and Brian E. Wilcox, individually, of Baltimore, Maryland

its true and lawful Attorney-in-Fact, to make, execute, seal and deliver for and on its behalf and as its act and deed any and all bonds and undertakings of Suretyship,

and to bind the UNITED PACIFIC INSURANCE COMPANY thereby as fully and to the same extent as if such bonds and undertakings and other writings obligatory in the nature thereof were signed by an Executive Officer of the UNITED PACIFIC INSURANCE COMPANY and sealed and attested by one or more of such officers, and hereby ratifies and confirms all that its said Attorney(s) in Fact may do in pursuance hereof.

This Power of Attorney is granted under and by authority of Article VII of the By Laws of UNITED PACIFIC INSURANCE COMPANY which became effective September 7, 1978, which provisions are now in full force and effect, reading as follows:

ARTICLE VII - EXECUTION OF BONDS AND UNDERTAKINGS

1. The Board of Directors, the President, the Chairman of the Board, any Senior Vice President, any Vice President or Assistant Vice President or other officer designated by the Board of Directors shall have power and authority to (a) appoint Attorneys in Fact and to authorize them to execute on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, and (b) to remove any such Attorney in Fact at any time and revoke the power and authority given to him.

2. Attorneys in Fact shall have power and authority, subject to the terms and limitations of the power of attorney issued to them, to execute and deliver on behalf of the Company bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof. The corporate seal is not necessary for the validity of any bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof.

3. Attorneys in Fact shall have power and authority to execute affidavits required to be attached to bonds, recognizances, contracts of indemnity or other conditional or obligatory undertakings and they shall also have power and authority to certify the financial statement of the Company and to copies of the By Laws of the Company or any article or section thereof.

This power of attorney is signed and sealed by facsimile under and by authority of the following Resolution adopted by the Board of Directors of UNITED PACIFIC INSURANCE COMPANY at a meeting held on the 5th day of June, 1979, at which a quorum was present and said Resolution has not been amended or repealed:

"Resolved, that the signatures of such Directors and officers and the seal of the Company may be affixed to any such power of attorney or any certificate relating thereto by facsimile and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached.

IN WITNESS WHEREOF, the UNITED PACIFIC INSURANCE COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed, this 26th day of April, 1985.



UNITED PACIFIC INSURANCE COMPANY

Vice President

STATE OF Pennsylvania }
COUNTY OF Philadelphia }
On this 26th day of April, 1985

Raymond MacNeil

to me known to be the Vice President of the UNITED PACIFIC INSURANCE COMPANY and acknowledged that he executed and attested the foregoing instrument and affixed the seal of said corporation thereto and that Article VII, Section 1, 2, and 3 of the By Laws of said Company, and the Resolution, set forth therein, are still in full force.

My Commission Expires

September 28, 1987



Notary Public in and for State of Pennsylvania

Residing at Philadelphia

I, P. D. Crossetta, Assistant Secretary of the UNITED PACIFIC INSURANCE COMPANY do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by said UNITED PACIFIC INSURANCE COMPANY which is still in full force and effect.

IN WITNESS WHEREOF I have hereunto set my hand and affixed the seal of said Company this 3rd day of May, 1985.



Assistant Secretary

HOME OFFICE FEDERAL WAY WASHINGTON

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, That the UNITED PACIFIC INSURANCE COMPANY, a corporation duly organized under the laws of the State of Washington, does hereby make, constitute and appoint Wilbur M. Priestler, S. J. Sandbank, F. S. Carnes, Jr., John R. Vasco, Gordon H. Prager, Stephen R. Murrert, Anna R. Daily and Brian E. Wilcox, individually, of Baltimore, Maryland

its true and lawful Attorney-in-Fact, to make, execute, seal and deliver for and on its behalf, and as its act and deed any and all bon and undertakings of Suretyship,

and to bind the UNITED PACIFIC INSURANCE COMPANY thereby as fully and to the same extent as if such bonds and undertakings and other writings obligatory in the nature thereof were signed by an Executive Officer of the UNITED PACIFIC INSURANCE COMPANY and sealed and attested by one other of such officers, and hereby ratifies and confirms all that its said Attorney(s) in Fact may do in pursuance hereof

This Power of Attorney is granted under and by authority of Article VII of the By Laws of UNITED PACIFIC INSURANCE COMPANY which became effective September 7, 1978, which provisions are now in full force and effect, reading as follows

ARTICLE VII - EXECUTION OF BONDS AND UNDERTAKINGS

1. The Board of Directors, the President, the Chairman of the Board, any Senior Vice President, any Vice President or Assistant Vice President or other officer designated by the Board of Directors shall have power and authority to (a) appoint Attorneys in-Fact and to authorize them to execute on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, and (b) to remove any such Attorney in Fact at any time and revoke the power and authority given to him

2. Attorneys in-Fact shall have power and authority, subject to the terms and limitations of the power of attorney issued to them, to execute and deliver on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof. The corporate seal is not necessary for the validity of any bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof.

3. Attorneys in Fact shall have power and authority to execute affidavits required to be attached to bonds, recognizances, contracts of indemnity or other conditional or obligatory undertakings and they shall also have power and authority to certify the financial statement of the Company and to copies of the By Laws of the Company or any article or section thereof

This power of attorney is signed and sealed by facsimile under and by authority of the following Resolution adopted by the Board of Directors of UNITED PACIFIC INSURANCE COMPANY at a meeting held on the 5th day of June, '979, at which a quorum was present, and said Resolution has not been amended or repealed

"Resolved, that the signatures of such directors and officers and the seal of the Company may be affixed to any such power of attorney or any certificate relating thereto by facsimile, and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached"

IN WITNESS WHEREOF, the UNITED PACIFIC INSURANCE COMPANY has caused these presents to be signed by its Vice President, and its corporate seal to be hereto affixed, this 26th day of April, 1984



UNITED PACIFIC INSURANCE COMPANY
Raymond MacNeill
Vice President

STATE OF Pennsylvania }
COUNTY OF Philadelphia }

On this 26th day of April, 1984, personally appeared Raymond MacNeill

to me known to be the Vice-President of the UNITED PACIFIC INSURANCE COMPANY, and acknowledged that he executed and attested the foregoing instrument and affixed the seal of said corporation thereto and that Article VII, Section 1, 2, and 3 of the By Laws of said Company, and the Resolution, set forth therein, are still in full force

My Commission Expires
September 28, 1987



Anna Rose White
Notary Public in and for State of Pennsylvania
Residing at Philadelphia

I, P. D. Crossetta, Assistant Secretary of the UNITED PACIFIC INSURANCE COMPANY do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by said UNITED PACIFIC INSURANCE COMPANY, which is still in full force and effect

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Company this 14th day of April, 1987



P. D. Crossetta
Assistant Secretary



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
COLORADO STATE OFFICE
2020 ARAPAHOE STREET
DENVER, COLORADO 80205

CO-943A(MN)
3104
Nationwide
Oil and Gas
Bond

J. D. R.

JUL 22 1985

DECISION

Principal(s): Columbia Gas Development Corporation
P.O. Box 1350
Houston, Texas 77251-1350
Bond Number: U-391050-16RR
Amount of Bond: \$150,000
Date Bond and Rider Executed: May 3, 1985

Surety: United Pacific Insurance Company
Date Bond and Rider Filed: May 20, 1985

Attorney
-in-Fact: John R. Vasco
United Pacific Insurance Company
3340 Eighth Avenue South, C-3000
Federal Way, Washington 98005

Nationwide Oil and Gas Bond and Rider Accepted

The above identified bond with rider attached have been examined and found satisfactory. They are accepted effective May 20, 1985, the date they were filed.

The bond constitutes coverage for all interests of the principal(s) in Federal oil and gas leases, except leases in the National Petroleum Reserve in Alaska. Federal leases do not include Indian leases. The rider assumes all liability under the principal's prior Nationwide bond.

Coverage under this bond, however, does not extend to additional principals, such as assignees of all or part of the principal's interests in any lease, nor will the coverage extend to any lands where the principal is the unit operator but does not hold the record title or the operating rights in such lands, either alone or together with other parties, all of whose interests are covered by appropriate bonds.

The bond will be maintained by this office. Termination of liability under the bond will be permitted only after this office is satisfied that either there is no outstanding obligation covered by the bond or satisfactory replacement bonding coverage has been furnished.

Evelyn W. Axelson
Evelyn W. Axelson
Chief, Mineral Leasing Section

cc:
All BLM State Offices
MMS-AFS, Denver

COLUMBIA GAS
Development



May 14, 1985

RECEIVED
MAY 24 1985
GENERAL ACCOUNTING

U.S. Department of the Interior
Bureau of Land Management
2020 Arapahoe Street
Denver, CO 80205

RE: Columbia Gas Development Corporation
Nationwide Oil and Gas Bond

88
MAY 20
MAY 11

Gentlemen:

Enclosed is the following executed bond with attached rider:

United Pacific Insurance Company
Bond No. U-391050-16RR
Amount: \$150.00
Effective Date: 5/03/85

Please be advised that this bond serves to replace the following bond as of May 3, 1985.

Seaboard Surety Company
Bond No. 639585
Amount: \$150.00
Cancellation Date: 5/03/85

Please acknowledge your acceptance by signing where indicated on the attached copy of this letter and returning it in the enclosed self-addressed stamped envelope. Retain the original for your files.

Should you have any questions, please contact me at (713) 940-3412.

Very truly yours,

John A. Wyatt
John A. Wyatt
Supervisor, General Accounting

W W Cagle
Received BY *W-9437*
5/21/85
Date

JAW/pw

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STATE, NATIONWIDE, OR NATIONAL PETROLEUM RESERVE
IN ALASKA OIL AND GAS BOND

Act of February 25, 1920 (30 U.S.C. Sec. 181)

Act of August 7, 1947 (30 U.S.C. Sec. 351)

Department of the Interior Appropriations Act, Fiscal Year 1981 (P.L. 96-514)

Other Oil and Gas Leasing Authorities as Applicable

35144-13

Bond No. U-391050-16RR

KNOW ALL MEN BY THESE PRESENTS, That we Columbia Gas Development Corporation

Houston, Texas

Principal, and United Pacific Insurance Company

State of Washington

Surety, are held and firmly bound unto the United States of America in the sum of One Hundred and Fifty thousand and 00/100----- dollars (\$ 150,000.00-----), in lawful money of the United States, which sum may be increased or decreased by a rider hereto executed in the same manner as this bond, for the use and benefit of (1) the United States, (2) the owner of any of the land subject to the coverage of this bond, who has a statutory right to compensation in connection with a reservation of the oil and gas deposits to the United States, and (3) any lessee or permittee under a lease or permit issued by the United States prior to the issuance of an oil and gas lease for the land subject to this bond, covering the use of the surface or the prospecting for, or development of, other mineral deposits on any portion of such land, to be paid to the United States. For such payment, well and truly to be made, we bind ourselves, each of our heirs, executors, administrators, and successors, jointly and severally.

The coverage of this bond shall extend to all of the principal's holdings of federal oil and gas leases in the United States, including Alaska, issued or acquired under the Acts cited in Schedule A.

The coverage of this bond extends only to the principal's holdings of federal oil and gas leases issued or acquired under the Acts cited and in the States named in Schedule A and to any other State or States that may be named in a rider attached hereto by the lessor with the consent of the surety.

The coverage of this bond extends only to the principal's holdings of federal oil and gas leases within the National Petroleum Reserve in Alaska.

SCHEDULE A

Oil Leasing Act of February 25, 1920 (30 U.S.C. Sec. 181), Acquired Lands Leasing Act of August 7, 1947 (30 U.S.C. Sec. 351), and other oil and gas leasing authorities as applicable.

NAMES OF STATES

conditions of the foregoing obligations are such that, whereas the said principal has an interest in oil and gas deposits issued under the Acts cited in this bond (1) as lessee, (2) as the approved holder of operating rights in any part of the lands covered by such leases under operating agreements with the lessees, or (3) as designated operator or agent under such leases pending approval of an assignment or operating agreement, and

tract, remove, and dispose of oil and gas deposits in or under the lands covered by the leases, operating agreements or designations and is obligated to comply with certain covenants and agreements set forth in such instruments, and

WHEREAS the principal and surety agree that without notice to the surety the coverage of this bond, in addition to the present holdings of the principal, shall extend to any

oil and gas lease hereafter issued to, or acquired by the principal in the States now named in Schedule A, or named in a rider, the coverage to be confined to the principal's holdings under the Acts cited and to become effective immediately upon such issuance or upon departmental approval of a transfer in favor of the principal.

Any operating agreement hereafter entered into or modified by the principal affecting oil and gas leases in the States now named in Schedule A, or later named in a rider. The coverage shall become effective immediately upon such issuance or upon departmental approval of the agreement or of a transfer of an operating agreement to the principal.

Any designation subsequent hereto of the principal as operator or agent of a lessee under a lease issued pursuant to the Acts cited and covering lands in a State named in Schedule A, either presently or by rider. This coverage shall become effective immediately upon the filing of such designation under a lease.

Any extension of a lease covered by this bond, such as to continue without any interruption due to the expiration of the term set forth in the lease. It is agreed, that the surety may elect to have the additional provisions authorized under this paragraph become inapplicable as to all interests of the principal acquired more than 30 days after the receipt of notice of such election from the Bureau of Land Management.

The surety hereby waives any right to notice of, and agrees that this bond shall remain in full force and effect notwithstanding.

Any transfer or transfers, either in whole or in part, of all of the leases, or of the operating agreements, and the surety agrees to remain bound under this bond as to the same, either in the leases or in the operating agreements, notwithstanding, that any such interest, when the approval of the Bureau of Land Management or transfers become effective.

Any modification of a lease or operating agreement, or any obligations thereunder, whether made or effected by the principal or the lessee, or any assignment of such lease or operating agreement to unit, pooling, communitization or storage, agreements, or amendments, contracts, suspensions of operations or production, alterations, suspensions or changes in rental, minimums, or other provisions, and royalties, compensatory royalty payments, or other provisions, shall not, in any way, release the principal and surety, or either of them, from any liability under this bond; and

WHEREAS the principal and surety hereby agree that notwithstanding the termination of any lease or leases, operating agreements or designations as operator or agent, covered by this bond, whether the termination is by operation of law or otherwise, the bond shall remain in full force and effect as to all remaining leases, operating agreements, or designations covered by the bond, and

WHEREAS the principal, as to any lease or part of a lease for lands as to which he has been designated as operator or agent, or approved as operator, in consideration of being permitted to furnish this bond in lieu of the lessees, agrees and by these presents does hereby bind himself to fulfill on behalf of each lessee all obligations of each such lease for the entire leasehold in the same manner and to the same extent as though he were the lessee, and

WHEREAS the principal and surety agree that the neglect or forbearance of said lessor in enforcing, as against the lessees of such lessor, the payment of rentals or royalties or the performance of any other covenant, condition or agreement of the leases, shall not, in any way, release the principal and surety, or either of them, from any liability under this bond; and

WHEREAS the principal and surety agree that in the event of any default under the leases, the lessor may commence and prosecute any claim, suit, action, or other proceeding against the principal and surety, or either of them, without the necessity of joining the lessees.

NOW, THEREFORE, IF said principle shall in all respects faithfully comply with all of the provisions of the leases referred to hereinbefore, then the above obligations are to be void, otherwise to remain in full force and effect.

on this 3rd day of May, 1985, in the presence of

NAMES AND ADDRESSES OF WITNESSES

W. H. Berger

Box 1350, Houston Texas 77001

Pratt St, Baltimore, Maryland 21202

Columbia Gas Development Corporation
By Colie M. Moore (Principal) (L.S.)

P O Box 1350, Houston, Texas 77001
(Business Address)

United Pacific Insurance Company
John R. Vasco (Surety) (L.S.)
Attorney-in-Fact

100 East Pratt St, Baltimore, Maryland 21202
(Business Address)

RIDER

Bond No. U-391050-16RR

It is hereby agreed by and between the undersigned principal(s) and surety in consideration for the additional premium or consideration paid for this rider, if any, and the consent by the United States to terminate the liability on Bond No. 839585 carrying the same principal(s) and Seaboard Surety Company as surety, the undersigned principal(s) and surety hereby assume any and all liabilities that may be outstanding on Bond No. 839585 including, but not limited to, the obligation properly to plug and abandon all wells existing on leases to which Bond No. 839585 applies and any unpaid rentals or royalties heretofore accruing; provided, however, that this rider shall not act to increase the potential or cumulative liability of the surety above the face amount of the bond to which this rider attaches.

Executed this 3rd day of May, 1985.

Witnesses:

Ann D Berger

Columbia Gas Development Corporation

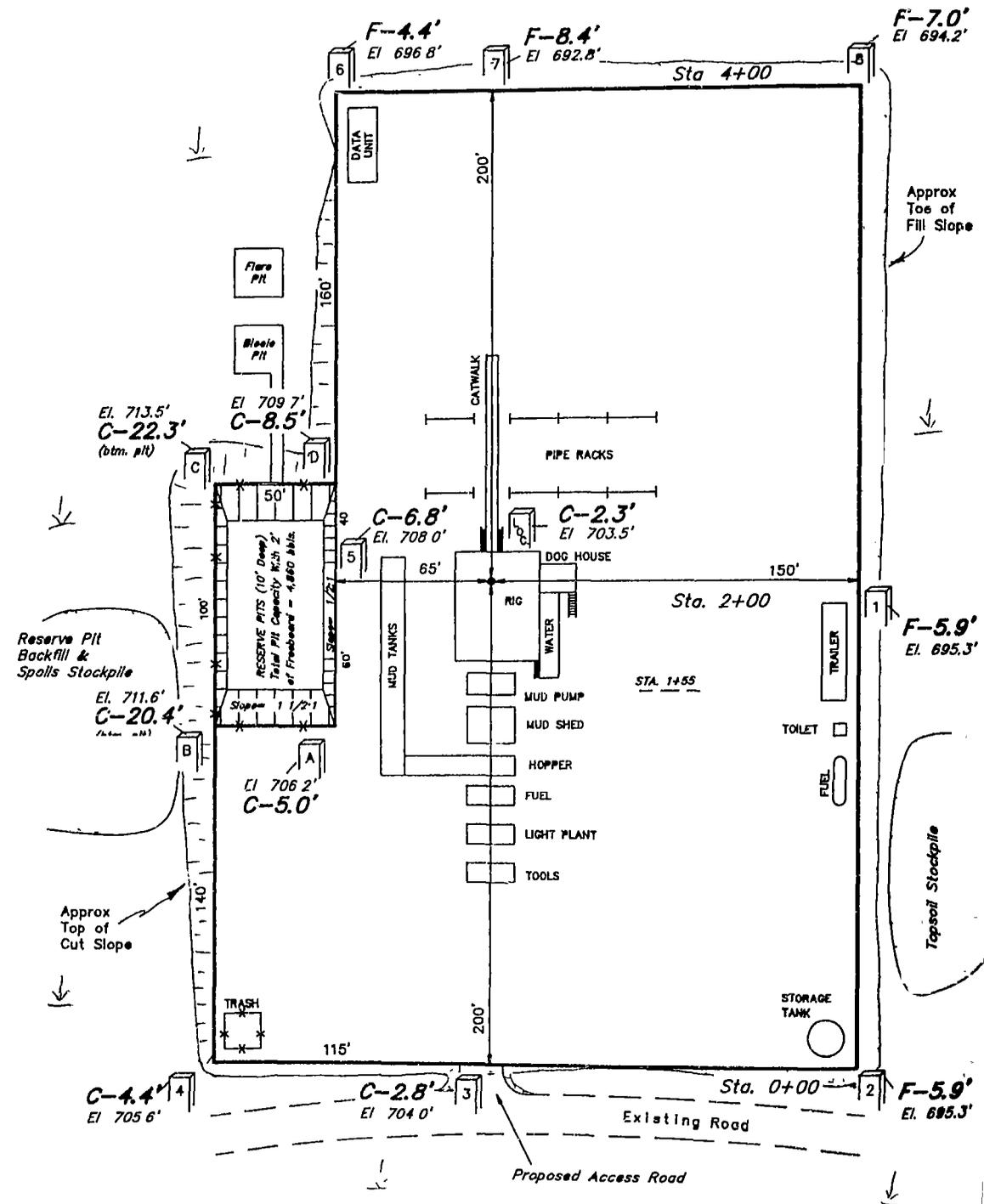
By: Luke M. May
(Principal)

(Principal)

John R. Vasco

John R. Vasco
(Surety)

John R. Vasco, Attorney-in-Fact
United Pacific Insurance Company



RECEIVED

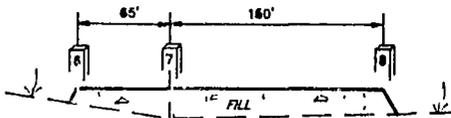
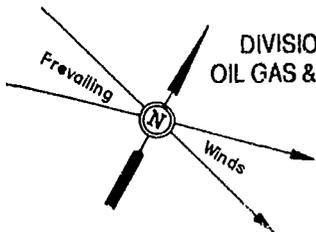
COLUMBIA GAS DEVELOPMENT CORP.

JUN 20 1991

LOCATION LAYOUT FOR

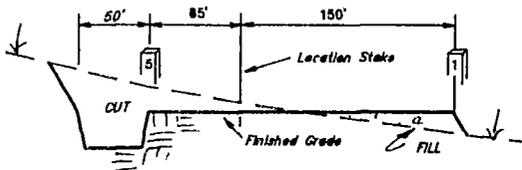
KANE SPRINGS FEDERAL #36-1
SECTION 36, T25S, R19E, S.L.B.#4M.

DIVISION OF
OIL GAS & MINING

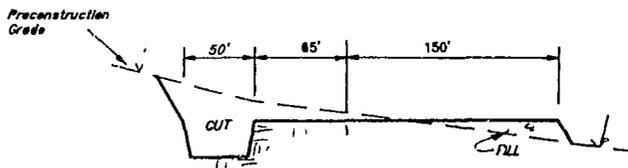


STA. 4+00

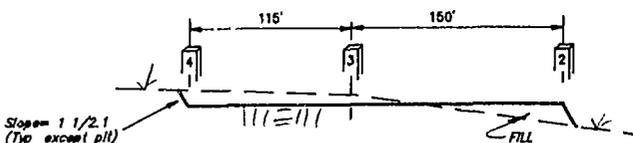
SCALE: 1" = 50'
DATE: 5-24-91
Drawn By: J.R.S



STA. 2+00



STA. 1+55



STA 0+00

APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,880 Cu. Yds.
Remaining Location	= 9,250 Cu Yds
TOTAL CUT	= 11,130 CU YDS.
FILL	= 8,170 CU.YDS.

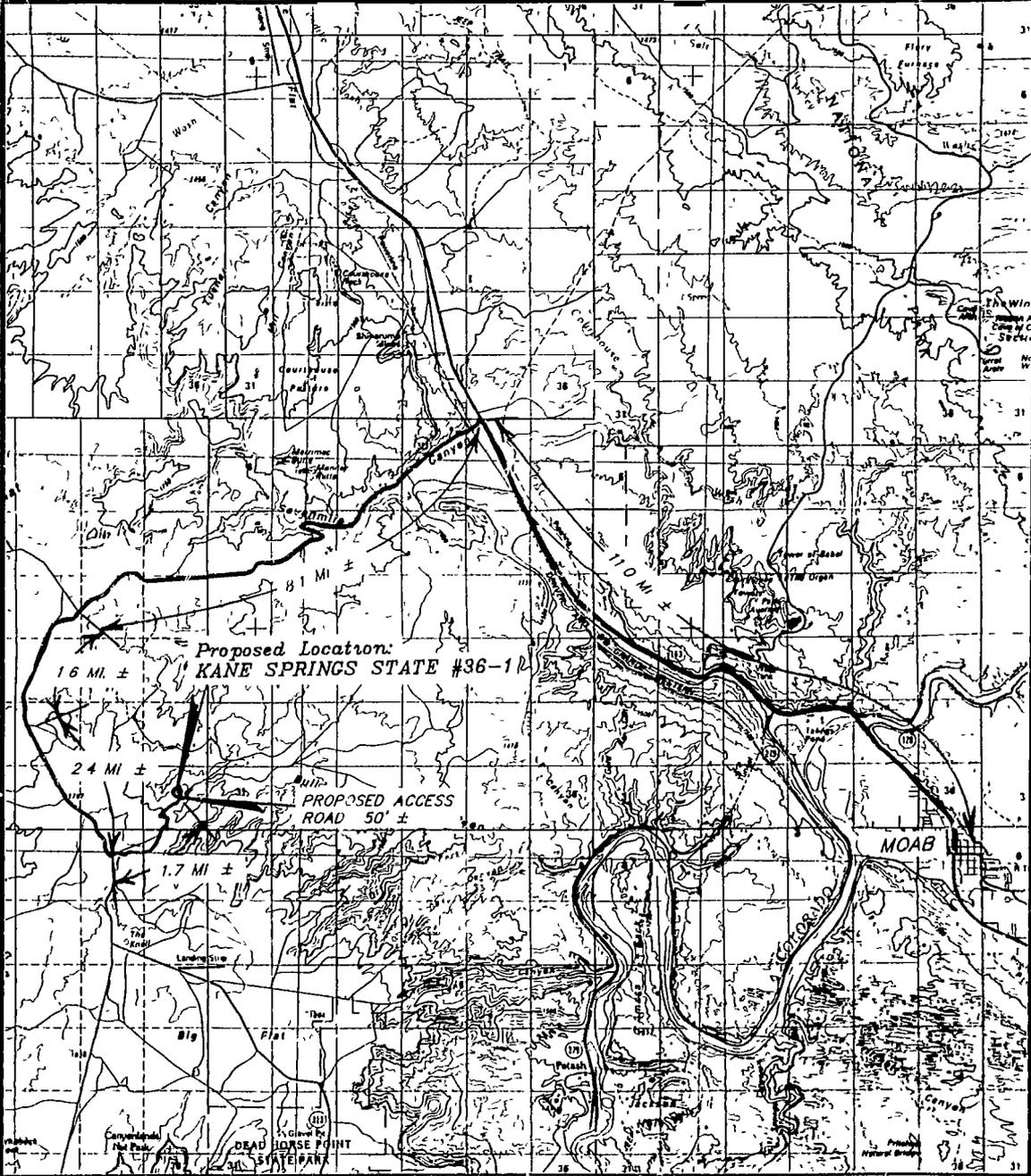
EXCESS MATERIAL AFTER	
5% COMPACTION	= 2,530 Cu. Yds.
Topsoil & Pit Backfill	= 2,510 Cu Yds.
(1/2 Pit Vol)	
EXCESS UNBALANCE	= 20 Cu. Yds
(After Rehabilitation)	

TYP. LOCATION LAYOUT
TYP. CROSS SECTIONS

NOTES.

Elev. Ungraded Ground At Loc Stake = 5703.5'

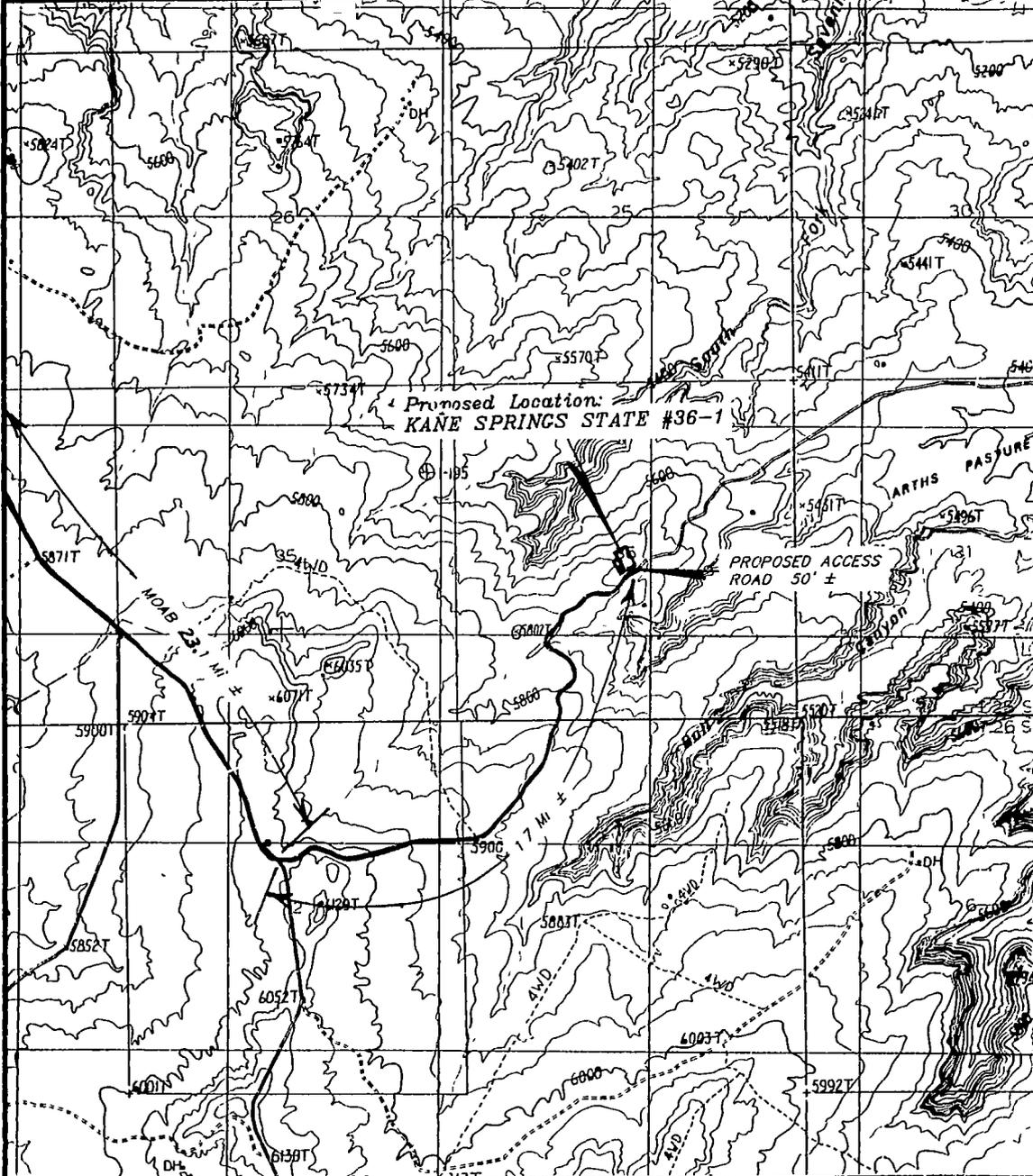
FINISHED GRADE ELEV AT LOC STAKE = 5701.2'



TOPOGRAPHIC
MAP "A"
DATE. 5-24-91 9EH



COLUMBIA GAS DEVELOPMENT CORP.
KANE SPRINGS STATE #36-1
SECTION 36, T25S, R19E, S.L.B.&M.



TOPOGRAPHIC
 MAP " B "
 SCALE 1" = 2000'
 DATE 5-24-91 REH



COLUMBIA GAS DEVELOPMENT CORP.
 KANE SPRINGS STATE #36-1
 SECTION 36, T25S, R19E, S.L.B.&M

COLUMBIA GAS
Development



June 19, 1991

VIA AIRBORNE EXPRESS

STATE OF UTAH NATURAL RESOURCES OIL,
GAS & MINING
355 W. North Temple, 3 Triad Center, Ste. #350
Salt Lake City, Utah 84180-1203

Attention: Ms. Tammy Searin

Reference: **COLUMBIA GAS DEVELOPMENT CORPORATION**
KANE SPRINGS STATE #36-1
SEC. 36-T258-R19E
GRAND COUNTY, UTAH

Dear Ms. Searin:

Pursuant to the Oil & Gas Conservation General Rule R615-3-3, Columbia Gas Development Corporation respectfully requests an exception to the location and siting of the above referenced location. Due to the topography of the area, compliance with the four hundred and sixty foot (460') spacing from the quarter-quarter lines is not feasible.

Columbia Gas Development Corporation's lease includes the four hundred and sixty foot distance from the quarter-quarter lines. Attached please find a copy of the lease boundaries for your records.

Should you have any questions, or require any additional information, please contact me at 713/871-3400.

Sincerely,

COLUMBIA GAS DEVELOPMENT CORPORATION

Aline A. Reese -

Aline A. Reese
Regulatory Clerk

CONFIDENTIAL

RECEIVED

JUN 20 1991

DIVISION OF
OIL GAS & MINING

STATE ACTIONS

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

1. ADMINISTERING STATE AGENCY
OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
2. STATE APPLICATION IDENTIFIER NUMBER:
(assigned by State Clearinghouse)
3. APPROXIMATE DATE PROJECT WILL START:
July 30, 1991
4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:
(to be sent out by agency in block 1)
Southeastern Utah Association of Governments
5. TYPE OF ACTION: Lease Permit License Land Acquisition
 Land Sale Land Exchange Other _____
6. TITLE OF PROPOSED ACTION:
Application for Permit to Drill
7. DESCRIPTION:
Columbia Gas Development Corporation proposes to drill the Kane Springs State #36-1 well (wildcat) on state lease ML-37794, Grand County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.
8. LAND AFFECTED (site location map required) (indicate county)
NE/4, SW/4, Section 36, Township 25 South, Range 19 East, Grand County, Utah
9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?
10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:
Degree of impact is based on the discovery of oil or gas in commercial quantities.
11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:
12. FOR FURTHER INFORMATION, CONTACT: Frank R. Matthews
PHONE: 538-5340
13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL

DATE: 6-24-91 Petroleum Engineer

CONFIDENTIAL 5035

OPERATOR Columbia Gas Development DATE 6-05-91

WELL NAME Kane Springs State # 36-1

SEC NE 1/4 36 T 05S R 19E COUNTY Grand

43-014-313020
API NUMBER

State (3)
TYPE OF LEASE

CHECK OFF:

- PLAT
- BOND
- NEAREST WELL
- LEASE
- FIELD SLOM
- POTASH OR OIL SHALE

PROCESSING COMMENTS:

Unit expansion approval of 4-1-91
Water Permit issued 6-00-91 (TU5376) 01-1081
Permit 6-04-91 (Geology subm) 6-06-91
ROCC 6-04-91
Potash area

APPROVAL LETTER:

SPACING: R615-2-3 Kane Springs R615-3-2
UNIT

N/A R615-3-3
CAUSE NO. & DATE

STIPULATIONS:

- + Add water permit
- 1. Potash
- 3. Reserve pit is to be lined with a synthetic liner.
- 4. Since this well is in an environmentally sensitive area which has a high degree of recreational use, extra care should be taken to minimize impact on the area



Stat of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter
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 84103-1203
801 538 5340

July 15, 1991

Columbia Gas Development Corporation
P. O. Box 1350
Houston, Texas 77251-1350

Gentlemen:

Re: Kane Springs State #36-1 Well, 2498 feet from the South line, 2577 feet from the West line, NE SW, Section 36, Township 25 South, Range 19 East, Grand County, Utah

Approval to drill the referenced well is hereby granted in accordance with Utah Code Ann. Section 40-6-18, et seq. (1953, as amended), and Utah Admin. R.615-2-3, subject to the following stipulations:

1. Special attention is directed to compliance with Utah Admin. R.615-3-31, which prescribes drilling procedures for designated potash areas.
2. Reserve pit is to be lined with a synthetic liner.
3. Since this well is in an environmentally sensitive area which has a high degree of recreational use, extra care should be taken to minimize impact on the area.

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

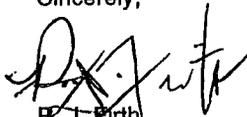
1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of Entity Action Form 6, within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.

Page 2
Columbia Gas Development Corporation
Kane Springs State #36-1
July 15, 1991

4. Prompt notification in the event it is necessary to plug and abandon the well. Notify R. J. Firth, Associate Director, (Office) (801) 538-5340, (Home) 571-6068, or J. L. Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Utah Admin. R.615-3-20, Gas Flaring or Venting.
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 Department of Environmental Quality, Division of Drinking Water/Sanitation, telephone (801) 538-6159.
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 43-019-31322.

Sincerely,



R. J. Firth

Associate Director, Oil & Gas

tas
Enclosures
cc: Bureau of Land Management
Division of State Lands
J. L. Thompson
we14/1-14

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5 LEASE DESIGNATION AND SERIAL NO
State of Utah 37794

6 IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7 UNIT AGREEMENT NAME
Kane Springs Fed. Unit

8 FARM OR LEASE NAME
Kane Springs State

9 WELL NO
#36-1

10 FIELD AND POOL, OR WILDCAT
Wildcat

11 SEC. T. R. M. OR BLE AND SURVEY OR AREA
Sec. 36-T25S-R19E

12 COUNTY OR PARISH 13 STATE
Grand Co. Utah

17 NO OF ACRES ASSIGNED TO THIS WELL
640 acres

20 ROTARY OR CABLE TOOLS
Rotary

22 APPROX. DATE WORK WILL START
end of July 1991

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 Horizontal SINGLE ZONE MULTIPLE ZONE

2 NAME OF OPERATOR
Columbia Gas Development Corporation

3 ADDRESS OF OPERATOR
P. O. Box 1350 Hou., TX. 77251-1350 DIVISION OF OIL GAS & MINING

4 LOCATION OF WELL (Report location clearly and in accordance with any State requirements *)
At surface
2498' FSL & 2577' FWL of Sec. 36-T25S-R19E
At proposed prod zone
150' FSL & 900' FEL of Sec. 36-T25S-R19E

14 DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approx. 12 air miles west of Moab, Utah

15 DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drlg unit line, if any)
640

16 NO OF ACRES IN LEASE
640 acres

17 NO OF ACRES ASSIGNED TO THIS WELL
640 acres

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

19 PROPOSED DEPTH
7692 TVD/10370MD

20 ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
Ground elevation 5703'

22 APPROX. DATE WORK WILL START
end of July 1991

23 PROPOSED CASING AND CEMENTING PROGRAM

Handwritten signature/initials

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 SIGNER Alvin A. Reese TITLE Regulatory Clerk DATE 6/18/91

(This space for Federal or State office use)

PERMIT NO _____ APPROVAL DATE JUN 25 1991
APPROVED BY /s/ WILLIAM C. STRINGER TITLE Assistant Secretary for Mining DATE _____
CONDITIONS OF APPROVAL IF ANY _____

*See Instructions On Reverse Side

T25S, R19E, S.L.B.&M.

COLUMBIA GAS DEVELOPMENT CORP.

Well location, KANE SPRINGS STATE #36-1, located as shown in the NF 1/4 SW 1/4 of Section 36, T25S, R19E, S.L.B.&M. Grand County, Utah.

R
1
9
E

R
2
0
E

N89°53'W - 39.89 (G.L.O.)

N89°53'W - 39.89 (G.L.O.)

N0°01'W - 40.00 (G.L.O.)

N0°01'W - G.L.O. (Basis of Bearings)
2641.96' - (Measured)

NORTH - 80.00 (G.L.O.)

KANE SPRINGS STATE #36-1
Elev. Ungraded Ground - 5703'

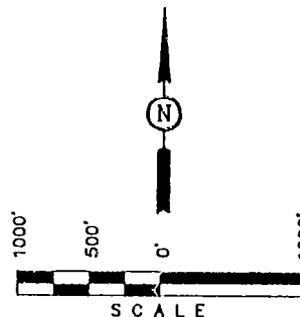
36

2577'

2498'

BASIS OF ELEVATION

THE KNOLL TRIANGULATION STATION LOCATED IN SECTION 11, T26S, R19E, S.L.B.&M TAKEN FROM THE KNOLL QUADRANGLE, UTAH, GRAND COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY SAID ELEVATION IS MARKED AS BEING 6316 FEET



CERTIFICATE

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

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

REVISED 5-24-91 REH

T25S
T26S

S89°59'35"E - 2635.28' (Measured)

WEST - 40.00 (G.L.O.)

G.L.O.

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(801) 789-1017

SCALE 1" = 1000'	DATE 5-19-91
PARTY J.T.K. D.A. B.D. K.L. REH	REFERENCES G.L.O. PLAT
WEATHER WIND	FILE

▲ = SECTION CORNERS LOCATED (Brass Caps)

F-4.4'
El. 696.8'

F-8.4'
El. 692.8'

F-7.0'
El. 694.2'

215' Sta. 4+00

PIPE RACKS
(STORAGE)

Approx.
Toe of
Fill Slope

FLARE PIT

El. 713.5'
C-22.3'
(stem pit)

BLOOE PIT

El. 709.7'
C-8.5'

PIPE RACKS

PIPE RACKS

TRAILER

TRAILER

TRAILER

TRAILER



El. 708.0'
C-6.8'

El. 703.5'
C-2.3'

CHOKE HOUSE

150' Sta. 2+00

Reserve Pit
Backfill &
Spoils Stockpile

El. 711.6'
C-20.4'
(stem pit)

RESERVE PITS (10' Deep)
Total Pit Capacity With 2'
of Freshwater = 4,860 bbls.

SHAKER TANK

PILL PIT

WATER TANK
500 MBLS.

F-5.9
El. 695.0

El. 706.2'
C-5.0'

SUCTION TANK

PUMP HOUSE

PUMP HOUSE

PUMP HOUSE

MUD STORAGE

No 3 MOTOR

No 2 MOTOR

No 1 MOTOR

S.C.R. HOUSE

SUITCASE

TRAILER

TRAILER

TRAILER

Approx
Top of
Cut Slope

C-4.4'
El. 705.6'

C-2.8'
El. 704.0'

Sta. 0+00

F-5.9
El. 695.0

MIXING TANK

BAR HOPPER

TOILET

BOILER WATER TANK

BOILER HOUSE

RIG FUEL TANK

TRASH

115'

Proposed Access Road

Existing Road

Topsoil Stockpile



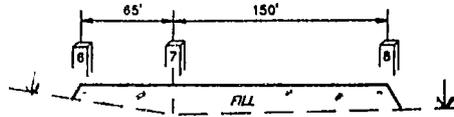
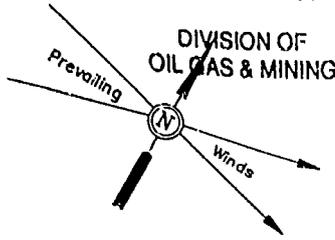
RECEIVED

JUN 25 1991

COLUMBIA GAS DEVELOPMENT CORP.

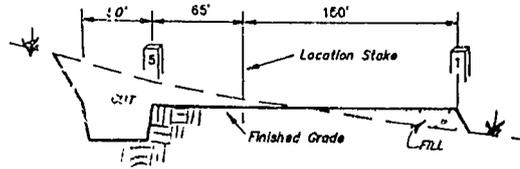
LOCATION LAYOUT FOR

KANE SPRINGS FEDERAL #36-1
SECTION 36, T25S, R19E, S.L.B.&M.

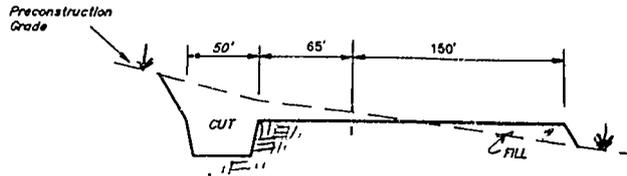
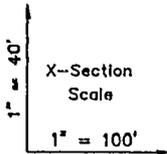


STA. 4+00

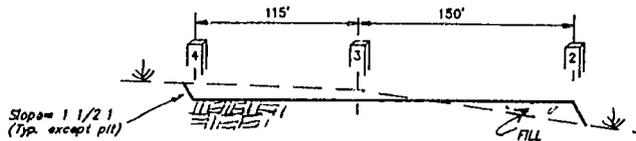
SCALE: 1" = 50'
DATE: 5-24-91
Drawn By J.R.S
REVISED. 6-19-91 R.E.H



STA. 2+00



STA. 1+55



STA. 0+00

APPROXIMATE YARDAGES

CUT		
(6") Topsoil Stripping	=	1,880 Cu Yds
Remaining Location	=	9,250 Cu. Yds
TOTAL CUT	=	11,130 CU YDS
FILL	=	8,170 CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION	=	2,530 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol)	=	2,510 Cu Yds.
EXCESS UNBALANCE (After Rehabilitation)	=	20 Cu. Yds.

TYP. LOCATION LAYOUT

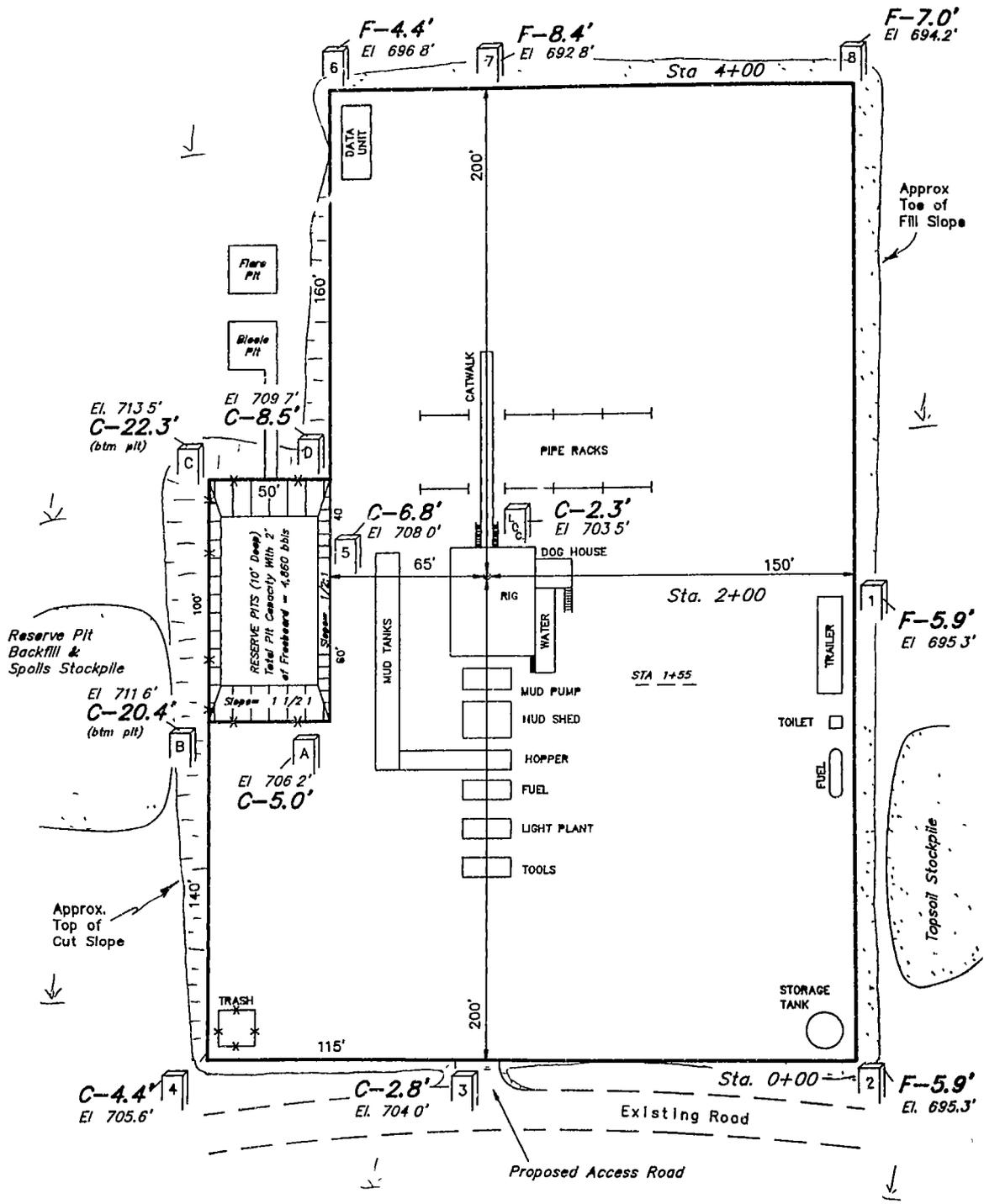
TYP. CROSS SECTIONS

NOTES:

Elev Ungraded Ground At Loc Stake = 5703.5'

FINISHED GRADE ELEV. AT LOC STAKE = 5701.2'

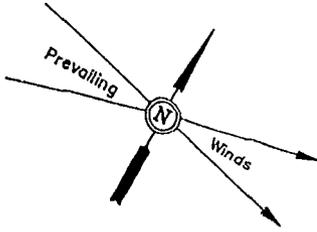
UINTAH ENGINEERING & LAND SURVEYING
85 South 200 East Pernal, Utah



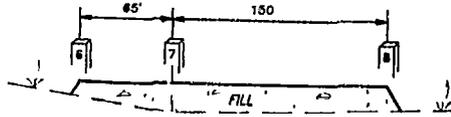
COLUMBIA GAS DEVELOPMENT CORP.

LOCATION LAYOUT FOR

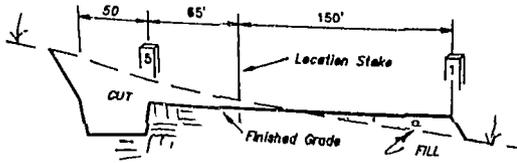
KANE SPRINGS FEDERAL #36-1
SECTION 36, T25S, R19E, S.L.B.&M.



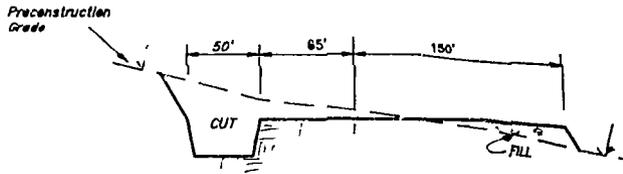
SCALE: 1" = 50'
DATE 5-24-91
Drawn By JRS



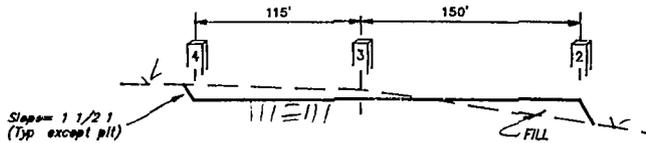
STA 4+00



STA. 2+00



STA. 1+55



STA. 0+00

APPROXIMATE YARDAGES

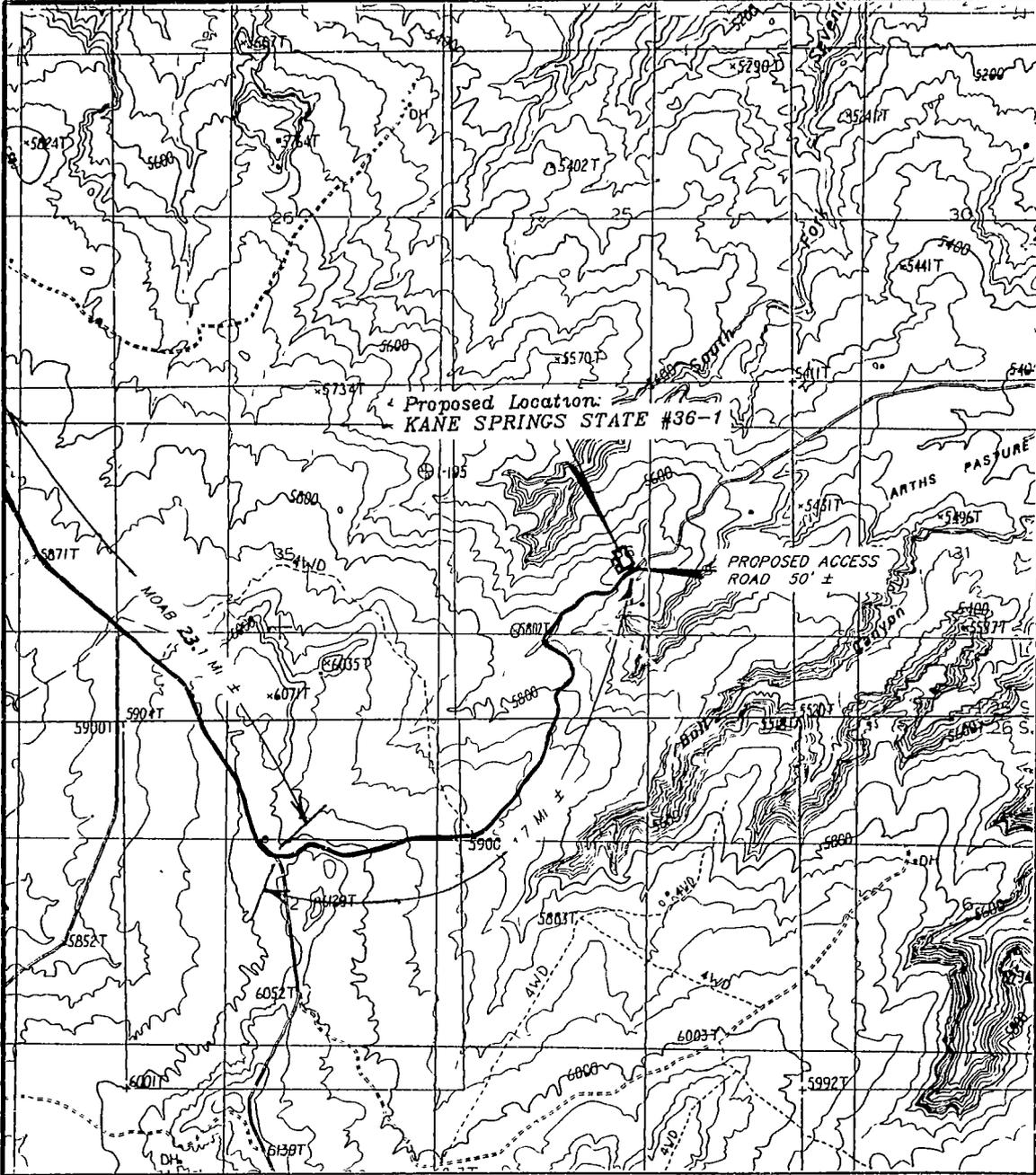
CUT		
(6") Topsoil Stripping	=	1,880 Cu Yds
Remaining Location	=	9,250 Cu Yds
TOTAL CUT	=	11,130 CU YDS.
FILL	=	8,170 CU.YDS.

EXCESS MATERIAL AFTER		
5% COMPACTION	=	2,530 Cu Yds
Topsoil & Pit Backfill	=	2,510 Cu Yds
(1/2 Pit Vol.)		
EXCESS UNBALANCE	=	20 Cu Yds
(After Rehabilitation)		

TYP. LOCATION LAYOUT
TYP. CROSS SECTIONS

NOTES:

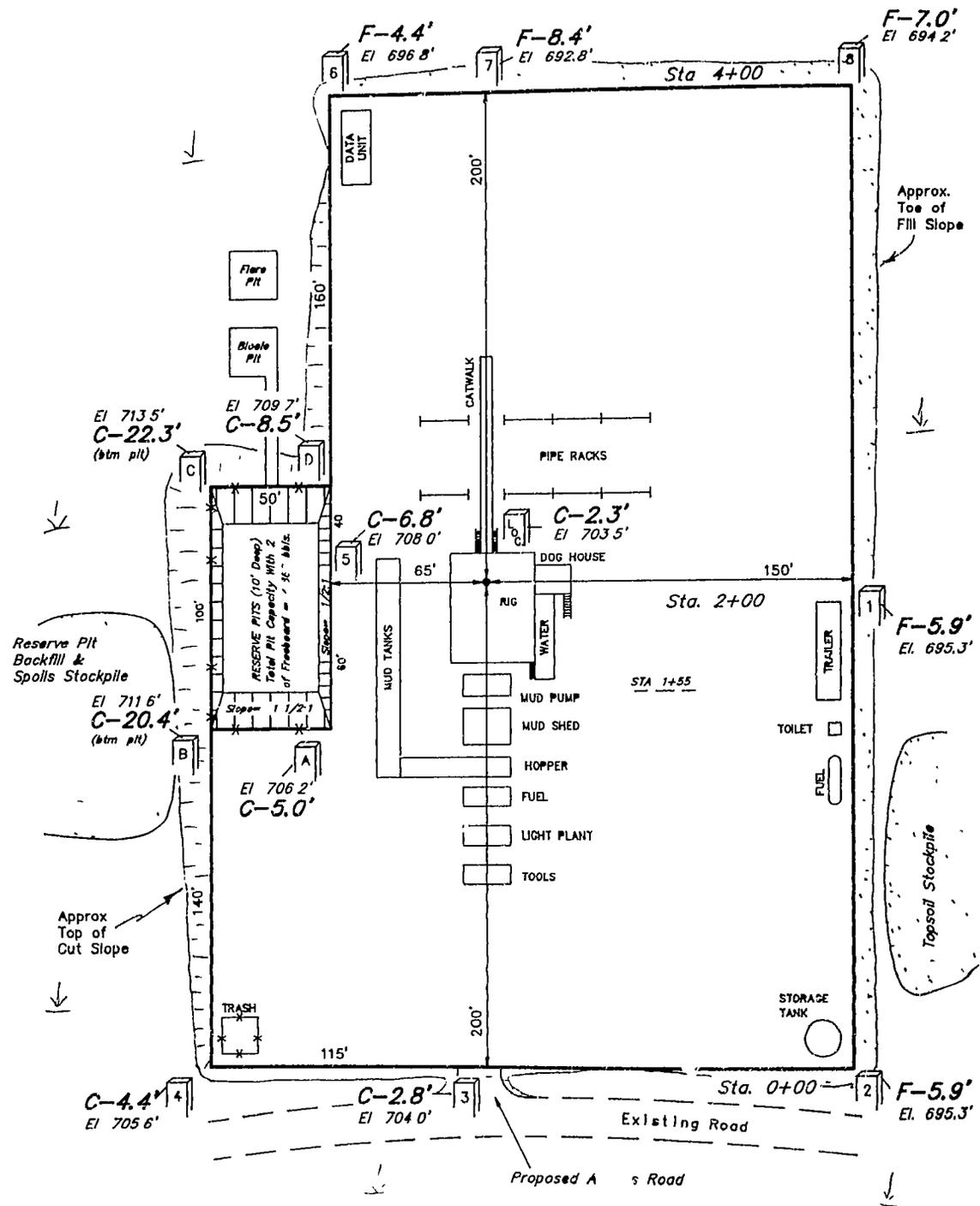
Elev. Ungraded Ground At Loc Stake = 5703.5'
FINISHED GRADE ELEV AT LOC STAKE = 5701.2'



TO P O G R A P H I C
 M A P " B "
 SCALE 1" = 2500'
 DATE 5-27-91 REH



C O L U M B I A G A S D E V E L O P M E N T C O R P
 K A N E S P R I N G S S T A T E # 3 6 - 1
 S E C T I O N 3 6 , T 2 5 S , R 1 9 E , S . L . B . & M .



RECEIVED

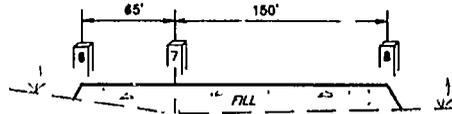
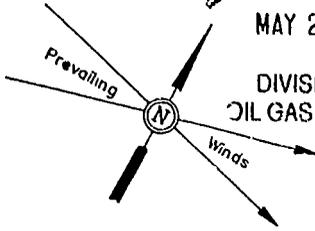
COLUMBIA GAS DEVELOPMENT CORP.

LOCATION LAYOUT FOR

KANE SPRINGS FEDERAL #36-1
SECTION 36, T25S, R19E, S.L.B.&M.

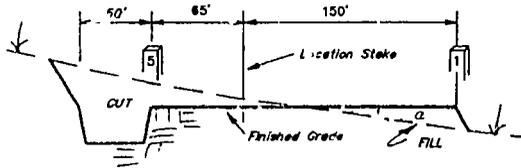
MAY 29 1991

DIVISION OF
OIL GAS & MINING

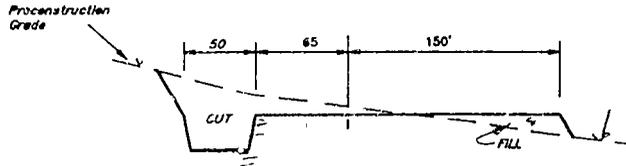


STA. 4+00

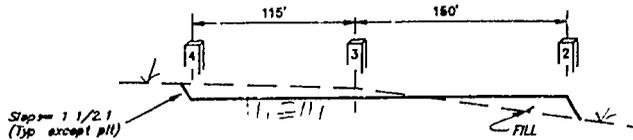
SCALE 1" = 50'
DATE 5-24-91
Drawn By JRS



STA. 2+00



STA. 1+55



STA. 0+00

APPROXIMATE YARDAGES

CUT (6") Topsoil Stripping	=	1,880 Cu Yds
Remaining Location	=	9,250 Cu Yds
TOTAL CUT	=	11,130 CU.YDS
FILL	=	8,170 CU.YDS

EXCESS MATERIAL AFTER 5% COMPACTION	=	2,530 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	2,510 Cu. Yds
EXCESS UNBALANCE (After Rehabilitation)	=	20 Cu. Yds

NOTES:

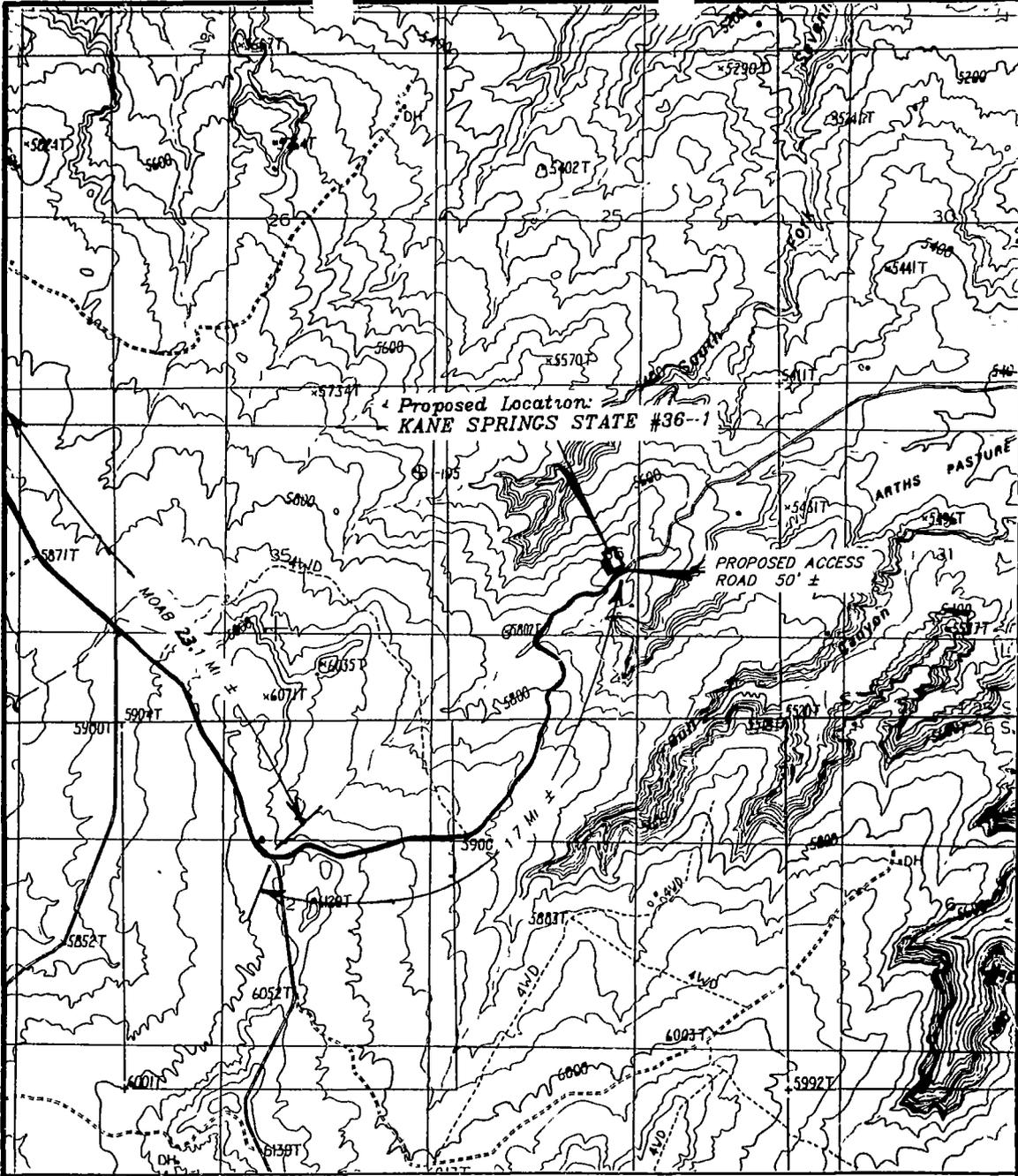
Elev Ungraded Ground At Loc Stake = 5703.5'

FINISHED GRADE ELEV AT LOC STAKE = 5701.2'

UINTAH ENGINEERING & LAND SURVEYING
85 South 200 East Vernal, Utah

1" = 40'
X-Section
Scale
1" = 100'

TYP. CROSS SECTION
TYP. LOCATION LAYOUT



TOPOGRAPHIC
MAP "B"
SCALE 1" = 2000'
DATE. 5-24-91 R.E.H



COLUMBIA GAS DEVELOPMENT CORP.
KANE SPRINGS STATE #36-1
SECTION 36, T25S, R19E, S.L.B.&M.

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. ML-40571
2. NAME OF OPERATOR Columbia Gas Development Corporation		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR P. O. Box 1350 Hou., TX. 77251-1350		7. UNIT AGREEMENT NAME Kane Springs Federal Unit
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below) At surface 2498' FSL & 2577' FWL of Sec.36 T25S-R19E		8. FARM OR LEASE NAME Kane Springs Federal
14. PERMIT NO. 43-019-31322	15. ELEVATIONS (Show whether SP, ST OR "A") Ground 5703'	9. WELL NO. #36-1
		10. FIELD AND FOOT, OR WILDCAT Wildcat
		11. SEC., T., R., N., OR S1/4 AND SURVEY OR AREA Sec.36-T25S-R19E
		12. COUNTY OR PARISH Grand
		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 ACIDISE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDISING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

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

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

Please be advised that the lease designation and Serial # for the above captioned location is ML-40571 and not U37794 as previously reported.

Verbal notification of revision was made to Mr. Frank Mathews on 11/1/91.

RECEIVED

NOV 07 1991

DIVISION OF
OIL GAS & MINING

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

SIGNED Aline A. Reese TITLE Regulatory Clerk DATE 11/1/91

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONVIL. 3 OF APPROVAL, IF ANY.

COLUMBIA GAS
Development



November 6, 1991

STATE OF UTAH OFC. OF NATURAL RESOURCES
DIVISION OF OIL, GAS & MINING
355 W. NORTH TEMPLE, 3 TRIAD CENTER, STE. #350
SALT LAKE CITY, UTAH 84180-1203

Attention: Mr. R. J. Firth

Reference: **COLUMBIA GAS DEVELOPMENT CORPORATION**
KANE SPRINGS STATE #36-1
SEC.36-T258-R19E
API NO. 43-019-31322

Dear Mr. Firth:

Please find enclosed Columbia's Sundry Notice, in triplicate, regarding the above referenced location.

If you have any questions, or require any additional information, please contact me at 713/871-3482.

Sincerely,

COLUMBIA GAS DEVELOPMENT CORPORATION

Aline A. Reese
Regulatory Clerk

AAR
Enclosure

RECEIVED

NOV 08 1991

DIVISION OF
OIL GAS & MINING

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

5 LEASE DESIGNATION (NO SERIAL NO.)
ML-40571

6 IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7 UNIT AGREEMENT NAME
Kane Springs Federal Unit

8 FARM OR LEASE NAME
Kane Springs State

9 WELL NO.
#36-1

10. FIELD AND FOOT, OR WILDCAT
Wildcat

11. SEC., T., S. N., OR B.L.K. AND SURVEY OR ABBA
Sec. 36-T25S-R19E

12. COUNTY OR PARISH 13 STATE
Grand Utah

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Columbia Gas Development Corporation 713/871-3400

3. ADDRESS OF OPERATOR
P. O. Box 1350 Hou., TX. 77251-1350

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below) AT SURFACE
2498' FSL & 2577' FWL of Sec. 36 T25S-R19E

14. PERMIT NO.
43-019-31322

15. ELEVATIONS (Show whether of, at, or, etc.)
Gr: 5703

CONFIDENTIAL

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 ACIDISE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDISING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(Other) Change in Bottom Hole Location

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

17 DESCRIBE ENHANCED OR UNEXPECTED 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.)

Please be advised of the following change in the bottom hole location for the above captioned location:

Proposed BHL: 1500' FNL & 300' FEL of Sec.36-T25S-R19E

This is approximately 3100' N 65 deg. W from the surface location.

This bottom hole location is the only change in plans as originally submitted for this well.

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
11-12-91
[Signature]

RECEIVED

NOV 08 1991

DIVISION OF OIL GAS & MINING

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

SIGNED *Aline A. Reese* TITLE Regulatory Clerk DATE 11/6/91
Aline A. Reese

(This space for Federal or State office use)

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



RECEIVED

FEB 24 1992

DIVISION OF
OIL GAS & MINING

February 19, 1992

Bureau of Land Management
Attn: Dale Manchester
82 E. Dogwood
Moab, UT 84532

State of Utah
Attn: R. J. Firth
355 W. N. Temple
3 Triad Center, Ste. 350
Salt Lake City, UT 84180-1203

**Reference: Columbia Gas Development Corporation
Kane Springs #36-1
Sec. 36-T258-R19E
Grand County, Utah**

Gentlemen:

Please find enclosed a Sundry Notice reporting a change in the section number of the bottom hole location of the above referenced well as previously reported.

Should you have any questions or require additional information, please contact me at 713/871-3400.

Very truly yours,

COLUMBIA GAS DEVELOPMENT CORPORATION

Wendy G. DesOrmeaux
Regulatory Coordinator

WGD
Enclosure

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

6 Lease Designation and Serial Number
ML-40571

7 Indian Allottee or Tribe Name

N/A

8 Unit or Communitization Agreement

Kane Springs Federal Ut.

9 Well Name and Number

Kane Springs State 36-1

10 API Well Number

43-019-31322

11 Field and Pool, or Wildcat
Wildcat

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. Type of Well

Oil Well Gas Well Other (specify)

2 Name of Operator

Columbia Gas Development Corporation

3 Address of Operator

P. O. Box 1350, Houston, TX 77251-1350

4 Telephone Number

713/871-3482

5 Location of Well

Footage 2498' FSL & 2577' FWL of Sec. 36-T25S-R19E

County Grand

QQ, Sec. T, R, M

State UTAH

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

NOTICE OF INTENT
(Submit in Duplicate)

- | | |
|--|---|
| <input type="checkbox"/> Abandonment | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Recompletion |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Shoot or Acidize |
| <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Multiple Completion | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Other <u>Correction in Section # of BHL</u> | |

Approximate Date Work Will Start _____

SUBSEQUENT REPORT
(Submit Original Form Only)

- | | |
|--|---|
| <input type="checkbox"/> Abandonment * | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Shoot or Acidize |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Other _____ | |

Date of Work Completion _____

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

* Must be accompanied by a cement verification report.

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

Please be advised of the following correction in the Section number of the proposed bottom hole location of the above referenced well. The Section number was mistakenly reported on the previous Sundry Notice (11/6/91 - which advised of the change in BHL) as Section 36. The correct Section number of the proposed BHL is Section 35.

Proposed BHL: 1500' FNL & 300' FEL of Sec. 35-T25S-R19E.

RECEIVED

FEB 24 1992

DIVISION OF
OIL, GAS & MINING

CONFIDENTIAL

14 I hereby certify that the foregoing is true and correct

Wendy G. DesOrmeaux

Name & Signature

Wendy G. DesOrmeaux

Title

Regulatory
Coordinator

Date 2/19/92

(State Use Only)



RECEIVED

JUN 13 1992

DIVISION OF
OIL, GAS & MINING

June 15, 1992

State of Utah
Attn: Frank Matthews
355 W. N. Temple
3 Triad Center, Ste. 350
Salt Lake City, UT 84180-1203

Reference: Columbia Gas Development Corporation
Kane Springs State #36-1
Sec.36-T258-R19E
Grand County, Utah

Dear Mr. Matthews:

Please find enclosed a Sundry Notice requesting a one year extension to the drilling permit on the above referenced well.

Should you have any questions or require additional information, please contact me at 713/871-3482.

Very truly yours,

COLUMBIA GAS DEVELOPMENT CORPORATION

Wendy G. DesOrmeaux
Regulatory Coordinator

6 Lease Designation and Serial Number NL-40571
7 Indian Allottee or Tribe Name NA
8 Unit or Communitization Agreement Kane Springs Federal U
9 Well Name and Number Kane Springs State 36-1
10 API Well Number 43-019-31322
11 Field and Pool, or Wildcat Wildcat

SUNDRY NOTICES AND REPORTS ON WELLS

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

1 Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify)	
2 Name of Operator Columbia Gas Development Corporation	
3 Address of Operator P. O. Box 1350, Houston, TX 77251-1350	4 Telephone Number 713/871-3400
5 Location of Well Footage 2498' FSL & 2577' FWL of O.G. Sec. R.M. Sec. 36--T255-R19E County Grand State UTAH	

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

NOTICE OF INTENT
(Submit In Duplicate)

- Abandonment
 - Casing Repair
 - Change of Plans
 - Conversion to Injection
 - Fracture Treat
 - Multiple Completion
 - Other Request for extension of drilling permit
- Approximate Date Work Will Start _____

- New Construction
- Pull or Alter Casing
- Recompletion
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

SUBSEQUENT REPORT
(Submit Original Form Only)

- Abandonment
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Other _____
- New Construction
- Pull or Alter Casing
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

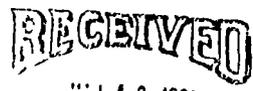
Date of Work Completion _____
 Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form
 * Must be accompanied by a cement verification report

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

The drilling permit on the above-referenced well is due to expire on July 15, 1992. Columbia Gas Development Corporation respectfully requests a one year extension to the drilling permit.

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

DATE: 6-19-92
 BY: [Signature]

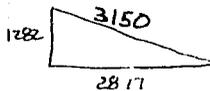
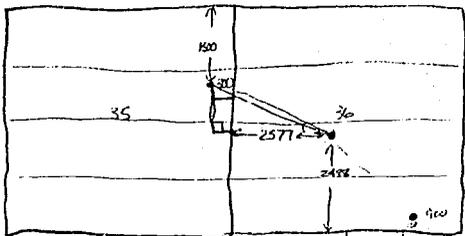


JUL 13 1992
 DIVISION OF
 OIL, GAS & MINING

14 I hereby certify that the foregoing is true and correct
 Name & Signature Wendy G. DesOrmeaux Title Regulatory Coord. Date 6/15/92
 (State Use Only)

COMPUTATION SHEET

BY _____ DATE _____ PROJECT _____ SHEET NO. _____ OF _____
 D.K.D. BY _____ DATE _____ FEATURE _____ ACTIVITY _____
 OFFICE _____ DETAIL _____



1282

$$\frac{2877}{3150} = \frac{300}{328}$$

328'

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

405,71

5 LEASE DESIGNATION AND SERIAL NO
State of Utah 37794

6 IF INDIAN ALLOTTEE OR TRIBE NAME
N/A

7 UNIT AGREEMENT NAME
Kane Springs Fed. Unit

8 FARM OR LEASE NAME
Kane Springs State

9 WELL NO
#36-1

10 FIELD AND POOL, OR WILDCAT
Wildcat

11 SEC. T. R. M. OF BLM, OR AREA AND SURVEY OR AREA
Sec. 36-T25S-R19E

12 COUNTY OR PARISH 13 STATE
Grand Co. Utah

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 horizontal SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
Columbia Gas Development Corporation

3. ADDRESS OF OPERATOR
P. O. Box 1350 Hou., TX. 77251-1350

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements *)
At surface 2498' FSL & 2577' FWL of Sec. 36-T25S-R19E
At proposed prod zone 150' FSL & 900' FEL of Sec. 36-T25S-R19E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approx. 12 air miles west of Moab, Utah

16. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drilg unit line, if any) 640

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

18 NO. OF ACRES IN LEASE 640 acres

19 PROPOSED DEPTH 7602 TVD/10370'WD

17 NO. OF ACRES ASSIGNED TO THIS WELL 640 acres

20 ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
Ground elevation 5703'

22 APPROX DATE WORK WILL START*
end of July 1991

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
Set	20"	94#	180'	to Sfc.w/175 sx Cl-B
17 1/2	13 3/8"	61# K-55	4000'	265 sx Lite & 415 sx Cl-B
12 1/4	9 5/8	53# S-95	7730'	1745 sx Cl-G
	5 1/2	20# S-95	10370'	(production liner)

RECEIVED

See attached supplemental info.

1. Eight Point Drilling Program
2. Multi-Point Surface Use Plan
3. BOPE Diagram
4. Certified surveyor's plat, Cut & fill Sheets & Topog.
5. Letter of Certification
6. Bond Info.

JUL 27 1992

DIVISION OF OIL, GAS & MINING

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.

SIGNED A. A. Reese TITLE Regulatory Clerk DATE 6/18/91

(This space for Federal or State office use)

PERMIT NO _____ APPROVAL DATE _____
/S/ WILLIAM C. STRINGER Assistant District Manager
APPROVED BY _____ TITLE for Minerals DATE 7/22/92

CONDITIONS OF APPROVAL, IF ANY
FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A
Dated 1/1/80

COMPLETED

*See Instructions On Reverse Side

T25S, R19E, S.L.B.&M.

COLUMBIA GAS DEVELOPMENT CORP.

Well location, KANE SPRINGS STATE #36-1, located as shown in the NE 1/4 SW 1/4 of Section 36, T25S, R19E, S.L.B.&M. Grand County, Utah.

R
1
9
E

R
2
0
E

N89°53'W - 39.89 (G.L.O.)

N89°53'W - 39.89 (G.L.O.)

N0°01'W - 40.00 (G.L.O.)

KANE SPRINGS STATE #36-1
Elev. Ungrcded Ground - 5703'

36

2577'

2498'

NORTH - 80.00 (G.L.O.)

N0°01'W - C.L.O. (Basis of Bearings)
2641.96' - (Measured)

T25S

T26S

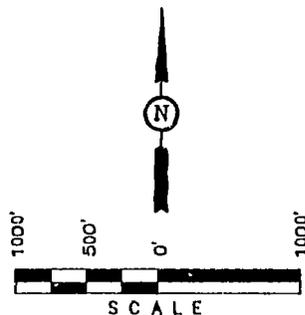
S89°59'35"E - 2635.28' (Measured)

WEST - 40.00 (G.L.O.)

C.C.
G.L.O.

BASIS OF ELEVATION

THE KNOLL TRIANGULATION STATION LOCATED IN SECTION 11, T26S, R19E, S.L.B.&M TAKEN FROM THE KNOLL QUADRANGLE, UTAH, GRAND COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY SAID ELEVATION IS MARKED AS BEING 6116 FEET



CERTIFICATE

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

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

REVISED 5-24-91 REH

UINTAH ENGINEERING & LAND SURVEYING
65 SOUTH 200 EAST - VERNAL, UTAH 84078
(801) 768-1017

SCALE 1" = 1000'	DATE 5-19-91
PARTY JTK D.A BD KL REH	REFERENCES G.L.O PLAT
WEATHER WARM	FILE COLUMBIA GAS DEV. CORP.

▲ = SECTION CORNERS LOCATED. (Brass Cops)

Columbia Gas Development Corporation
Kane Springs State No. 36-1
SL: NESW Sec. 36, T. 25 S., R. 19 E., Lease ML-40571
BHL: SENE Sec. 35, T. 25 S., R. 19 E., Lease U-53624
Grand County, Utah
Kane Springs Federal Unit

CONDITIONS OF APPROVAL

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

Be advised that Columbia Gas Development Corporation is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by CG0356 (Principal Columbia Gas Development Corporation) via surety consent as provided for in 43 CFR 3104.2.

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

This permit will be valid for a period of one year from the date of approval. A one-time, 90 day extension of this period may be granted. After permit termination, a new application must be filed for approval.

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

A. DRILLING PROGRAM

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

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

3. The BLM shall be kept apprised of all fluids entering or leaving the pit, through either weekly drilling reports or a final status report, submitted with the completion report. Either of which shall be submitted prior to reclamation of the pits.

4. No trivalent or hexavalent chromate additives shall be used in the mud system. Due to potential for contamination of usable quality water aquifers, chromates are banned from Federal leases.

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

6. When the completion program is determined, a sundry notice describing the completion shall be submitted to this office for approval.

7. Should the well become productive, the BLM, District Office must be notified no later than five business days after production begins. Notification shall be by letter or sundry notice, or orally to be followed by a letter or sundry notice.

8. Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMcf following its completion, whichever comes first, without prior written approval of the Authorized Officer.

9. BOP systems will be consistent with API RP 53 and Onshore Oil and Gas Order No. 2. Pressure tests of the surface casing and all BOP equipment potentially subject to pressure will be conducted before drilling the surface casing shoe. Blowout preventer controls will be installed prior to drilling the surface casing shoe and will remain in use until the well is completed or abandoned. Ram preventers shall be inspected and operated each trip (no more than once a day is necessary), and annular preventers shall be inspected and operated weekly to ensure good mechanical working order. These inspections shall be recorded on the daily drilling report.

10. A 2000 psi, or greater, BOP system shall be used down to the setting depth of the intermediate casing at 4000 feet.

11. The pressure control equipment will be upgraded to 10,000 psi prior to drilling through the 13-3/8 inch intermediate casing shoe at 4000 feet.

12. Surface casing shall be set at least 50 feet into the Chinle Formation, shall be equipped with a centralizer on each of the bottom three joints and shall be cemented to surface.

13. The production casing must be cemented a minimum of 100 feet into the intermediate casing.

14. As proposed in the drilling program, a cement bond log (CBL) or cement evaluation tool (CET) shall be run on the production casing to determine the cement top and bond quality. This log shall be promptly submitted to the BLM, District Office following logging operations.

C. REQUIRED NOTIFICATIONS AND APPROVALS

Required verbal notifications are summarized in Table 1, attached.

Spud- Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District office within twenty-four (24) hours after spudding (regardless of whether spud was made with a dry hole digger or big rig). If the spudding occurs on a weekend or holiday, the written report will be submitted on the following work day.

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

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

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

A first production conference will be scheduled within fifteen (15) days after receipt of the first production report. The Resource Area Office will coordinate the field conference.

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

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the BLM, M-0-D District Office prior to initiating plugging operations. Table 1 of this document provides the after-hour phone numbers of personnel who are authorized to give plugging instructions.

A "Subsequent Report of Abandonment" (Form 3160-1) will be filed with the Assistant District Manager, Minerals Division within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current plugging status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

Venting/Flaring of Gas- NTL-4A allows venting/flaring of gas during the initial well evaluation period not to exceed 30 days or 50 MMcf. Venting/flaring beyond the initial test period threshold must be approved by the District Office.

TABLE 1

NOTIFICATIONS

Notify Jack Johnson of the Grand Resource Area, at (801) 254-8193 for the following:

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

1 day prior to spudding.

50 feet prior to reaching surface and intermediate casing depths;

3 hours prior to testing BOPE;

12 hours prior to reaching kickoff point depth.

If the person at the above number cannot be reached, notify Fred Oneyear in the Moab District Office at (801) 259-6111 or at home at (801) 259-5937. If unsuccessful, notify one of the people listed below.

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

Dale Manchester, Petroleum Engineer Office: (801) 259-6111
Home: (801) 259-6239

Eric Jones, Petroleum Engineer Office: (801) 259-6111
Home: (801) 259-2214

If unable to reach the above individuals, please call the following:

Lynn Jackson, Office: (801) 259-6111
Chief, Branch of Fluid Minerals Home: (801) 259-7990

DRILLING LOCATION ASSESSMENT

**State of Utah
Division of Oil, Gas and Mining**

OPERATOR: COLUMBIA GAS DEVELOPMENT CORPORATION
WELL NAME: KANE SPRINGS STATE #36-1
SECTION: 36 TWP: 25S RNG: 19E LOC: 2498 FSL 900 FEL
QTR/QTR NE/SE COUNTY: GRAND FIELD: WILDCAT
SURFACE OWNER: STATE OF UTAH
SPACING: 460 F SECTION LINE 460 F QTR/QTR LINE 920 F ANOTHER WELL
(FEDERAL UNIT TO BE ESTABLISHED)
INSPECTOR: BRAD HILL DATE AND TIME: 5/30/91 17:30

PARTICIPANTS: Frank Matthews-DOGM, Ken Phippen-DWR, Doug Fullmer-
State Lands, Bobby Pier-Columbia

REGIONAL SETTING/TOPOGRAPHY: The proposed location is located on
a high, flat area between two canyons on the northwest and
southeast. It is approximately 11 miles west of Moab, Utah and
approximately 5 miles north of Dead Horse Point State Park.

LAND USE:

CURRENT SURFACE USE: Occasional domestic grazing and recreational
use.

PROPOSED SURFACE DISTURBANCE: A roughly rectangular pad will be
constructed with approximate dimensions of 400'X 265' including a
100'X 50'X 10' reserve pit. Access will be off of an existing
road.

AFFECTED FLOODPLAINS AND/OR WETLANDS: None

FLORA/FAUNA: Ephedra, Blackbrush, Juniper, Prickly pear, Pinion,
Cliffrose, Single Leaf Ash/Lizards, Rabbits, Deer

ENVIRONMENTAL PARAMETERS

SURFACE GEOLOGY

SOIL TYPE AND CHARACTERISTICS: Silty-sand with abundant
sandstone fragments.

SURFACE FORMATION & CHARACTERISTICS: Kayenta-Wingate

EROSION/SEDIMENTATION/STABILITY: No active erosion or
sedimentation at present. Location should be stable.

PALEONTOLOGICAL POTENTIAL: None observed.

SUBSURFACE GEOLOGY

OBJECTIVES/DEPTHS: Cane Creek-7577'

ABNORMAL PRESSURES-HIGH AND LOW: High pressures are anticipated in the Cane Creek interval.

CULTURAL RESOURCES/ARCHAEOLOGY: To be done.

CONSTRUCTION MATERIALS: Onsite materials will be used for construction.

SITE RECLAMATION: The site will be reclaimed as per State Lands instructions.

RESERVE PIT

CHARACTERISTICS: The reserve pit will be rectangular in shape with dimensions of 100'X 50'X 10'.

LINING: The pit shall be lined with a synthetic liner of at least 12 mil thickness which shall be installed so as to prevent punctures..

MUD PROGRAM: (See APD)

DRILLING WATER SUPPLY: To be determined.

OTHER OBSERVATIONS

This well is in an environmentally sensitive area which has a high degree of recreational use. Extra care should be taken to minimize impact on the area.

STIPULATIONS FOR APD APPROVAL

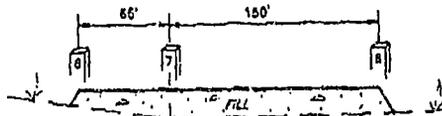
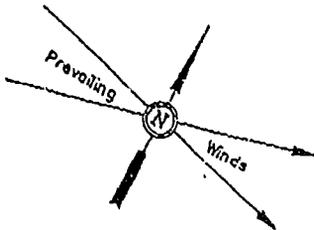
Reserve pit is to be lined with a synthetic liner.

ATTACHMENTS

Photographs will be on file.

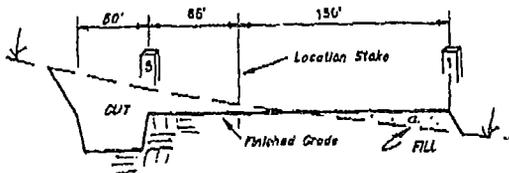
COLUMBIA GAS DEVELOPMENT CORP.

**LOCATION LAYOUT FOR
KANE SPRINGS FEDERAL #36-1
SECTION 36, T25S, R19E, S.L.B.&M.**



STA. 4+00

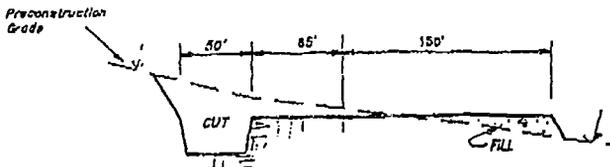
SCALE: 1" = 50'
DATE: 5-24-81
Drawn By: J.R.S.



STA. 2+00

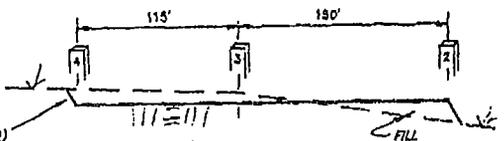
X-Section Scale

1" = 100'



STA. 1+55

Slope = 1 1/2:1
(Typ. except pit)



STA. 0+00

APPROXIMATE YARDAGES

CUT		
(6") Topsoil Stripping	=	1,880 Cu. Yds.
Remaining Location	=	9,250 Cu. Yds.
TOTAL CUT	=	11,130 CU.YDS.
FILL	=	8,170 CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION	=	2,530 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	2,510 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	=	20 Cu. Yds.

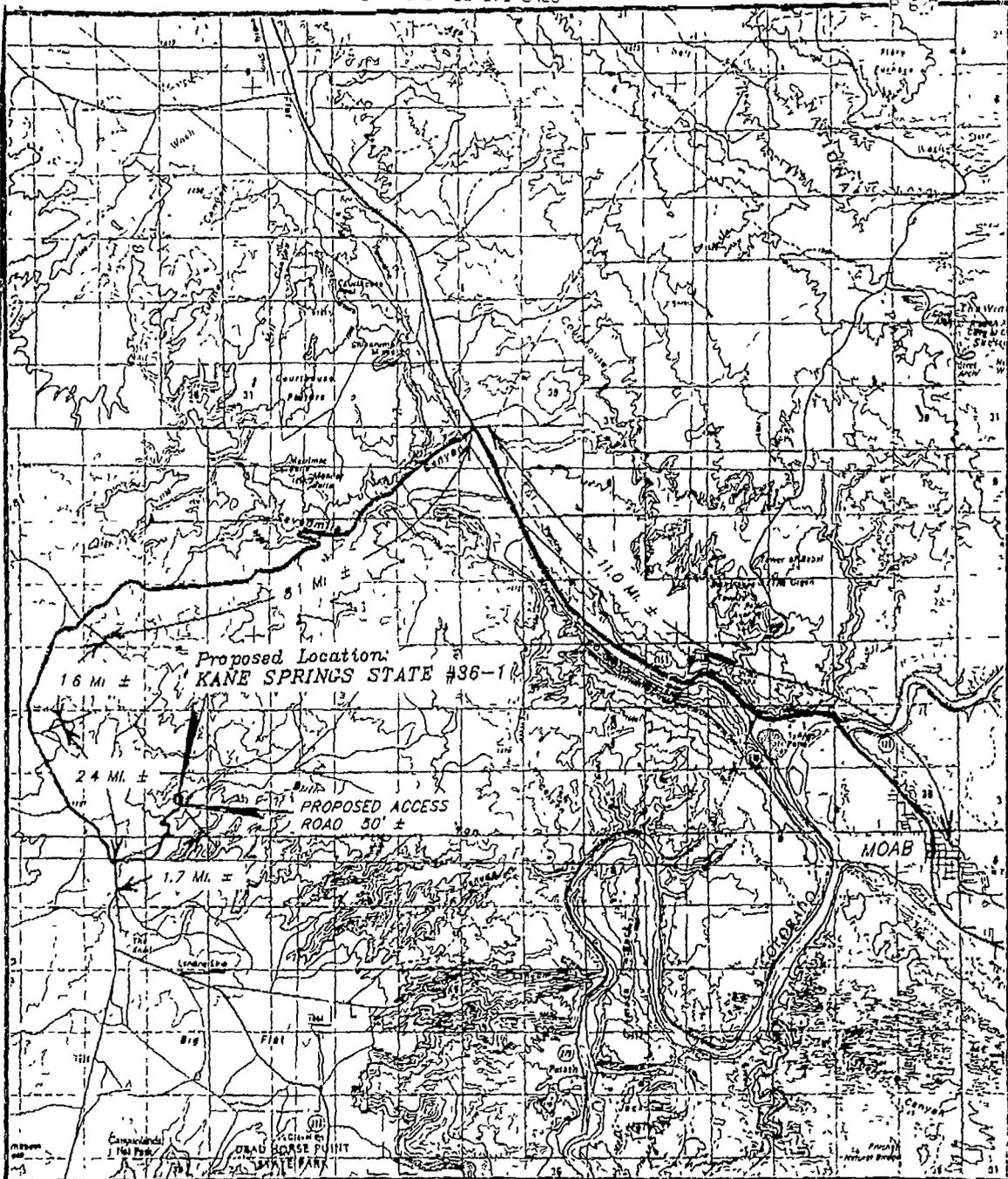
TYP. LOCATION LAYOUT

TYP. CROSS SECTIONS

NOTES:

Elev. Ungraded Ground At Loc. Stake = 5703.5'

FINISHED GRADE ELEV. AT LOC. STAKE = 5701.2'



TOPOGRAPHIC
MAP "A"

DATE 5-24-91 REH.



COLUMBIA GAS DEVELOPMENT CORP.

KANE SPRINGS STATE #36-1
SECTION 36, T25S, R19E, S.L.B.&M.

SOUTHEASTERN UTAH ASSOCIATION OF LOCAL GOVERNMENTS

P. O. Drawer 1106 • Price, Utah 84501 • Telephone 637-5444

WILLIAM D. HOWELL
Executive Director

AREAWIDE CLEARINGHOUSE A-95 REVIEW

1401-07

NOI ___ Preapp ___ App ___ State Plan ___ State Action X Subdivision ___ (ASP # 7-711-4)

Other (indicate) _____ SAI Number _____

Applicant (Address, Phone Number).

Federal Funds:

Requested: _____

Oil, Gas and Mining
355 West North Temple
3 Triad Center Suite 350
Salt Lake City, UT 64180-1203

Title:

APPLICATION FOR PERMIT TO DRILL
Columbia Gas Dev. Corp. - Kane Springs State #36-1 on ML-37794

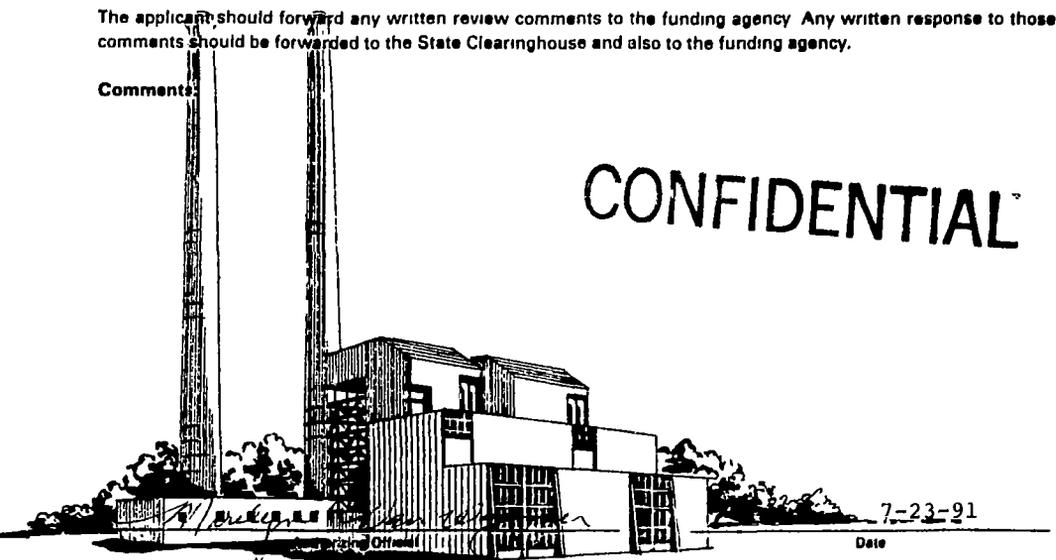
Sec. 36, T. 25S, R. 19E
API NO. 43-019-31322

- No comment
- See comments below
- No action taken because of insufficient information
- Please send your formal application to us for review Your attendance is requested

The applicant should forward any written review comments to the funding agency. Any written response to those comments should be forwarded to the State Clearinghouse and also to the funding agency.

Comments:

CONFIDENTIAL



Date

COLUMBIA GAS

Development

February 3, 1993

Bureau of Land Management
Attn: Eric Jones
82 E. Dogwood
Moab, UT 84532

State of Utah
Attn: R. J. Firth
355 W. N. Temple
3 Triad Center, Ste. 350
Salt Lake City, UT 84180-1203

Reference: Columbia Gas Development Corporation
Kane Springs #20-1, Sec.20-T26S-R19E
Kane Springs #36-1, Sec.36-T25S-R19E
Grand County, Utah

Gentlemen:

Please find Sundry Notices requesting a one year extension to the drilling permits for the above-referenced well.

Should you have any questions or require additional information, please contact me at 713/871-3400.

Very truly yours,

COLUMBIA GAS DEVELOPMENT CORPORATION



Wendy G. DesOrmeaux
Regulatory Coordinator

RECEIVED

MAR 05 1993

DIVISION OF
OIL GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Designation and Serial No.
ML-40571

6. If Indian, Allottee or Tribe Name
N/A

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation
Kane Springs Federal Unit

1. Type of Well
 Oil Well Gas Well Other

8. Well Name and No.
Kane Springs State 36-1

2. Name of Operator
Columbia Gas Development Corporation

9. API Well No.
43-019-31392

3. Address and Telephone No.
P. O. Box 1350, Houston, Texas 77251-1350

10. Field and Pool, or Exploratory Area
Wildcat

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2498' FSL & 2577' FWL of Sec.36-T25S-R19E

11. County or Parish, State
Grand County, Utah

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

TYPE OF SUBMISSION

- Notice of Intent
- Subsequent Report
- Final Abandonment Notice

TYPE OF ACTION

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

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

Columbia Gas Development Corporation respectfully requests a one year extension to the drilling permit for the above-referenced well. Current permits are due to expire 7/22/93 (BLM) and 6/19/93 (State). We are continuing to evaluate information from the wells already drilled and need the additional information to be gained from the 34-1, 18-1, and 21-1 wells before a final decision is made on the drilling of this well. Current plans are to drill this well in next year's drilling program.

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

DATE: 3-8-93
BY: [Signature]

RECEIVED

MAR 05 1993

DIVISION OF
OIL GAS & MINING

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

Signed [Signature] Title Regulatory Coordinator Date 3/2/93

(This space for Federal or State office use)

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



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

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West Nurnn Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-358-3940 (Fax)
801-538-5319 (TDD)

November 2, 1994

Ms. Wendy G. DesOrmeaux
Columbia Gas Development Corporation
P.O. Box 1350
Houston, Texas 77251-1350

Re: Kane Springs State 36-1 Well, Sec. 36, T. 25S, R. 19E, Grand County, Utah,
API No. 43-019-31322

Dear Ms. DesOrmeaux:

Due to excessive time delay in commencing drilling operations, approval to drill the subject well is hereby **rescinded**, effective immediately.

Please note that 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,

Don Staley
Administrative Manager
Oil and Gas

cc: BLM - Moab District
R.J. Firth
Well File

