UTAH DIVISION OF OIL AND GAS CONSERVATION

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

*6/7/77 - Footage location change

LOCATION ABANDONED 12-6-77

DATE FILED 1-18-77

LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. U-19237-A INDIAN

DRILLING APPROVED: 1-14-77 o.k. Rule C-3

SPUDDED IN:

COMPLETED: PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION: 6705'GL

DATE ABANDONED: 12-6-77 LA'D

FIELD: Wildcat 3/86

UNIT:

COUNTY: Kane

WELL NO. Federal 44-5 API NO: 43-025-30017

LOCATION ~~526'~~ *346'(LO) FT. FROM ~~XX~~ (S) LINE. 729' FT. FROM (E) ~~XX~~ (W) LINE. SE SE ¼ – ¼ SEC. 5

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
38S	3E	5	HOUSTON OIL & MINERALS				

6/1/77 Footage location change to:
(346' FSL & 729' FEL)

FILE NOTATIONS

Entered in N I D File	✓	Checked by Chief	
Entered On S R Sheet		Copy N I D to Field Office	
Location Map Pinned		Approval Letter	
Card Indexed	✓	Disapproval Letter	
I W R for State or Fee Land			

COMPLETION DATA:

Date Well Completed		Location Inspected	
OW	WW TA	Bond released	
GW	OS PA	State of Fee Land	

LOGS FILED

Driller's Log

Electric Logs (No.)

E I E-I GR GR-N Micro

Lat Mi-L Sonic Others

MRS
11-15

HOUSTON OIL & MINERALS CORPORATION

January 8, 1977

State of Utah
Division of Oil, Gas & Mining
1588 West, North Temple
Salt Lake City, Utah 84116

Re: HOM Federal 44-5
Sec. 5-T38S-R3E
Kane County, Utah

Attention: Mr. Pat Driscoll

Gentlemen:

Enclosed are two copies of the application for permit to drill Houston Oil & Minerals' Federal 44-5 in Kane County, Utah.

If there is any additional information you may require for approval, please do not hesitate to contact this office.

Respectfully yours,

Ronald D. Scott
District Drilling Engineer

RDS/gs
Enclosures 2

RECEIVED
JAN 13 1977
DIVISION OF OIL, GAS, & MINING

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

16

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: U-19237-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [x] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [ ] OTHER — SINGLE ZONE [x] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Federal

2. NAME OF OPERATOR: Houston Oil & Minerals Corporation

9. WELL NO.: 44-5

3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 504, Denver, Colorado 80290

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 526' FSL and 729 FEL, Sec. 5-T38S-R3E
At proposed prod. zone: same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 5-T38S-R3E

RECEIVED
JAN 13 1977
DIVISION OF OIL, GAS, & MINING

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 24 miles south of Escalante, Utah

12. COUNTY OR PARISH: Kane

13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
526'	160	160
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
N/A	9000'	rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6705' (Ungraded Ground Elevation)

22. APPROX. DATE WORK WILL START*: February 20, 1977

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
30"	20"	94.0#	75'	100 sx.
14-3/4"	9-5/8"	36.0#	3000'	2000 sx.
8-3/4"	7"	23#, 26#	9000'	700 sx.

Set 13-3/8" conductor casing, circulate cement to surface, install BOP's. Drill to 2500' with native mud and set 9-5/8" surface casing with 1-1/4" parasite string; nipple up with 14" Series 1500 double hydraulic ram type BOP and rotating head, with necessary choke manifold. Pressure test to 3000 psi. No high pressures are anticipated, however, the minimum safety requirements for the state of Utah and USGS will be followed.

Drill to approximately 9000', using air as far as possible, then mud up with a low solids, non-dispersed system, utilizing the parsite string (to lighten hydrostatic column and prevent lost circulation). Mud logging and sample anlysis will be utilized from surface to TD, with cores and DST's taken where necessary to properly evaluate any potentially productive zones (see attachment for estimated formation tops).

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

24.

SIGNED Ronald D. Scott TITLE District Drilling Engineer DATE January 8, 1977
Ronald D. Scott

(This space for Federal or State office use)

PERMIT NO. 43-025-30017 APPROVAL DATE

APPROVED BY TITLE DATE

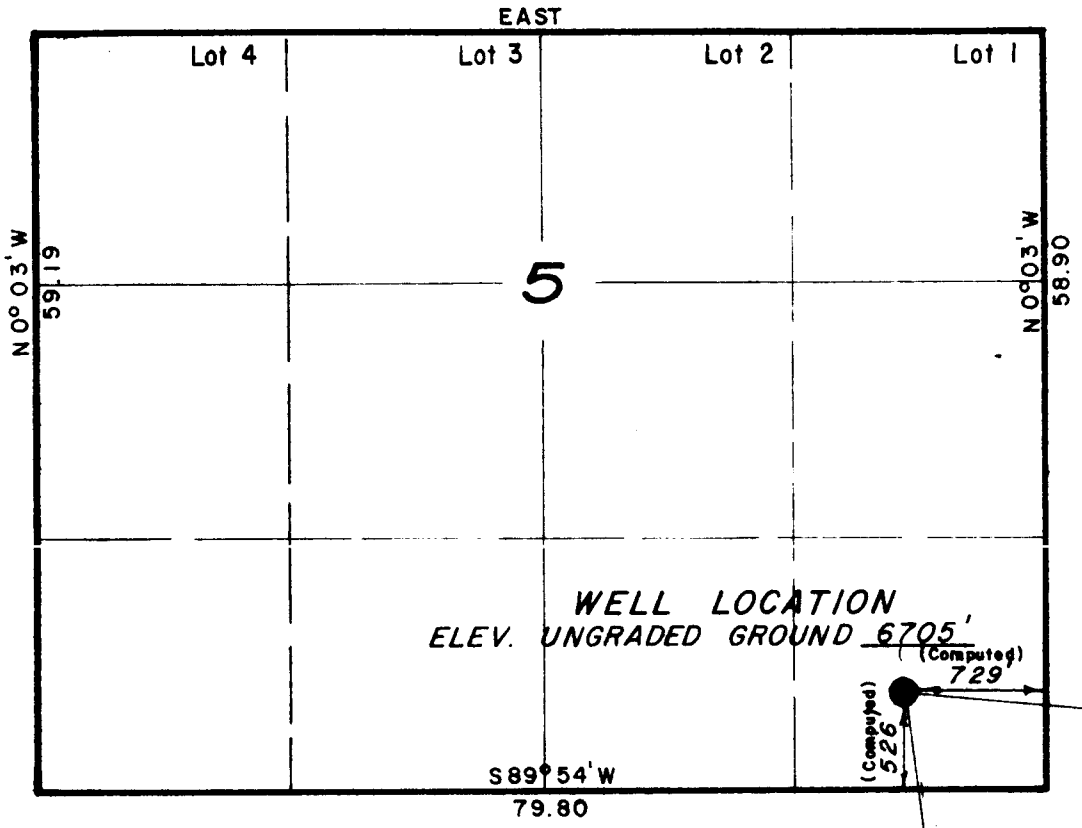
CONDITIONS OF APPROVAL, IF ANY:

T 38 S , R 3 E, S. L. B. & M.

PROJECT

HOUSTON OIL & MINERAL CORP.

Well location, located as shown in SE 1/4 SE 1/4 Section 5, T 38S, R3E, S.L.B.& M., Kane County, Utah.



NOTE:

Elevation was run from Dry Hole marker in the SE 1/4 NE 1/4 Section 8, T38S, R3E, S.L.B. & M. Elevation on Dry Hole Marker was 6710 and was used for basis of Elevation on this plat.

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 2454
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P. O. BOX Q — 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 3 Jan. 1977
PARTY N.J.M., D. B. & H.M.	REFERENCES GLO Notes
WEATHER Cool	FILE Houston Oil & Mineral Corp.

HOUSTON OIL & MINERAL CORP.

12 Point Surface Use Plan

for

Well Location

Located In

Section 5, T38S, R3E, SLB&M

Kane County, Utah

1. EXISTING ROADS

See attached Topographic Map "A".

To reach the Houston Oil & Mineral Corporation well location in the SE 1/4 SE 1/4 of Section 5, T38S, R3E, SLB&M, proceed west out of Escalante, Utah along Utah State Highway 12 to its junction with the Alvey Wash Road; then proceed south along the Alvey Wash road approximately 22.48 miles to its junction with a road that runs to the east; proceed east along this road 1.12 miles to the point of intersection with the proposed access road to the aforesaid well location. No new construction will be required along any portion of this road.

2. PLANNED ACCESS ROAD

See Topographic Map "B".

There will have to be 0.27 miles more or less of new access road built from an existing road in the NE 1/4 of Section 8, T38S, R3E SLB&M to the proposed Houston Oil & Mineral Corp. well location in the SE 1/4 SE 1/4 of Section 5, T38S, R3E, SLB&M.

This proposed access road will be a 12' crown road (6' either side of the centerline) with drain ditches along either side of the proposed road where it is determined necessary in order to handle any run off from any normal meteorological conditions that are prevalent to this area.

The grade of this road will vary from flat to 8%, but will not exceed this amount. The road will be constructed from native borrow accumulated during construction.

The terrain that is traversed by this road is mountainous and is vegetated with juniper and pinion pine with undergrowth of shadscale, sagebrush, and grasses.

3. LOCATION OF EXISTING WELLS

As shown on Topographic Map "B", there are existing wells within a one mile radius of the proposed well site. See Topographic Map "B" for the approximate location of the aforesaid wells.

4. LOCATION OF TANK BATTERIES, PRODUCTION FACILITIES, AND PRODUCTION GATHERING AND SERVICE LINES

All production facilities are to be contained within the proposed location site. There are no other Houston Oil & Mineral Corp. flow, gathering, injection, or disposal lines within a one mile radius. In the event production is established, plans for any necessary production facilities from the location shall be submitted. (See attached Topographic Map "B".)

5. LOCATION AND TYPE OF WATER SUPPLY

Water used to drill this well is to be hauled from Camp Springs located in the SW 1/4 SW 1/4 Section 36, T37S, R2E, SLB&M approximately 2.7 miles to the northwest of the location site.

6. SOURCE OF CONSTRUCTION MATERIALS

All construction materials for this location site and access road shall be borrow materials accumulated during construction of the location site and access road. No additional road gravels or pit lining material from other sources are anticipated at this time.

7. METHODS FOR HANDLING WASTE DISPOSAL

All garbage and trash that can be burned, shall be burned. All unburnable garbage and trash accumulated during the development of this well shall be contained in the trash pit shown on the attached location layout sheet. When drilling activities have been completed, the rig moved off the location and production facilities set up, all garbage and trash on the location site shall be cleaned up, deposited in the trash pit, and covered with a minimum 4' of cover. All production waste such as cuttings, salts, chemicals, overflows of condensate, water, and drilling fluids shall be contained in the north cell of the reserve pit and upon completion of drilling activities, buried with a minimum of four feet of cover. A portable chemical toilet will be supplied for human waste. (See end paragraph in Item No. 10.)

8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. WELL SITE LAYOUT

See attached location layout plat. The BLM District Manager shall be notified before any construction begins on the proposed location site. When drilling activities commence, all work shall proceed in a neat and orderly sequence.

10. PLANS FOR RESTORATION OF SURFACE

As there is some marginal topsoil in the area, it will be stripped and stockpiled prior to drilling activities on the well site only (see Item No. 9). When all production activities have been completed, the location site and access road will be reshaped to the original contour and the topsoil, at the location site only, will be spread over the disturbed area. Any drainages re-routed during the construction and production activities shall be restored to their original line of flow. All additional wastes being accumulated during production activities and contained in the reserve pit and trash pit shall be buried with a minimum four feet of cover. The location site and access road shall be reseeded with a seed mixture recommended by the BLM District Manager, when the moisture content of the soil is adequate for germination. Restoration activities shall begin within 90 days after completion of the well. Once completion activities have begun, they shall be completed within 30 days. The lessee further covenants and agrees that all of said cleanup and restoration activities shall be done and performed in the best and most workmanlike manner and in strict conformity with the above mentioned Items No. 7 and No. 10.

11. OTHER INFORMATION

The Topography of the general area consists of a series of plateaus rising from the Escalante River to the north and continuing to the south into the Kaiparowits Plateau, which extends in a northwesterly - southeasterly direction.

OTHER INFORMATION (Continued)

The sides of the plateaus, are in the most part, extremely steep at the bottom and cliffs formed by sandstone, conglomerate or shale are not uncommon around the top portion.

The major drainages either flow to the northeast into the Escalante River or to the south into the Colorado River, of which the aforesaid Escalante River is a tributary.

The majority of the surrounding drainages are of a non-perennial nature with normal flow limited to the early spring run off and extremely heavy rain storms of long duration. This type of storm is of an extremely rare nature as the normal annual percipitation is only 8".

The plateau that this location is situated on is above Right Hand Collet Canyon and slopes to the northwest. (See Topographic Map "B".)

All the drainages in the immediate area are non-perennial streams and flow to the northeast and are tributaries to the Escalante River.

The soils in this semi-arid area are of the Upper Cretaceous and consists of a light yellowish-gray, sandy-clay type soils with poorly graded gravels.

Outcrops of sandstone and conglomerate are common.

The topsoils in the area range from a sandy clay (SM-ML) type soil to a clayey (OL) type soil.

Due to the low percipitation average, climate conditions and the marginal types of soils, the vegetation that is found in the area is common of the semi-arid region we are located in and in the lower elevations, it consists of juniper and pinion forests as the primary flora with areas of shadscale, sagebrush, rabbit brush, some grasses, and cacti.

The fauna of the area consists predominantely of the mule deer, coyotes, rabbits and varieties of small ground squirrels and other types of rodents. The area is used by man for the primary purpose of grazing domestic livestock.

The birds of the area are hawks, finches, ground sparrows, magpies, crows, and jays.

The immediate area surrounding the location site has been chained to remove the pinion and juniper trees and has been reseeded with Crested Wheat Grasses, which is interlaced with sparce amounts of sagebrush and cacti.

The ground slopes through the location site to the northwest at approximately a 4% grade. (See Topographic Map "B" and Location Layout Sheet.)

There are no occupied dwellings or other facilities of this nature in the general area.

There are no visible archaeological, historical, or cultural sites within any reasonable proximity of the proposed location site. (See Topographic Map "B".)

Houston Oil & Mineral Corp
Section 5, T38S, R3E SLB&

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Ron Scott
1700 Broadway, Suite ~~#604~~ 504
Denver, Colorado ~~80203~~ 80290

Business Phone: (303) 861-7942

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

1/10/77
DATE

Ron Scott
Ron Scott

Dist. Drlg. Engr.
TITLE

HOUSTON OIL & MINERAL CORP.
WELL LOCATION IN SE¼ SE¼
SEC. 5, T38S, R3E, S.L.M.

TOPO MAP "B"

ROAD CLASSIFICATION

Heavy-duty ——— Light-duty - - - -
Medium-duty — — — Unimproved dirt .....
U.S. Route ○ State Route

UTAH

15.6 Mi. TO SCALANTE, UTAH

PROPOSED LOCATION (HOUSTON OIL & MINERAL CORP)

PROPOSED ACCESS ROAD (0.27 Mi)

EXISTING ROAD

HOUSTON OIL & MINERAL CORP. (NW¼ NW¼)

DRY HOLE MARKER

1.12 Miles

6.88 Mi.

T37S T38S

GARFIELD CO KANE CO

U.S.A. (BLM)

Star Seep

Right Hand Collet Canyon

Camp Spring Canyon

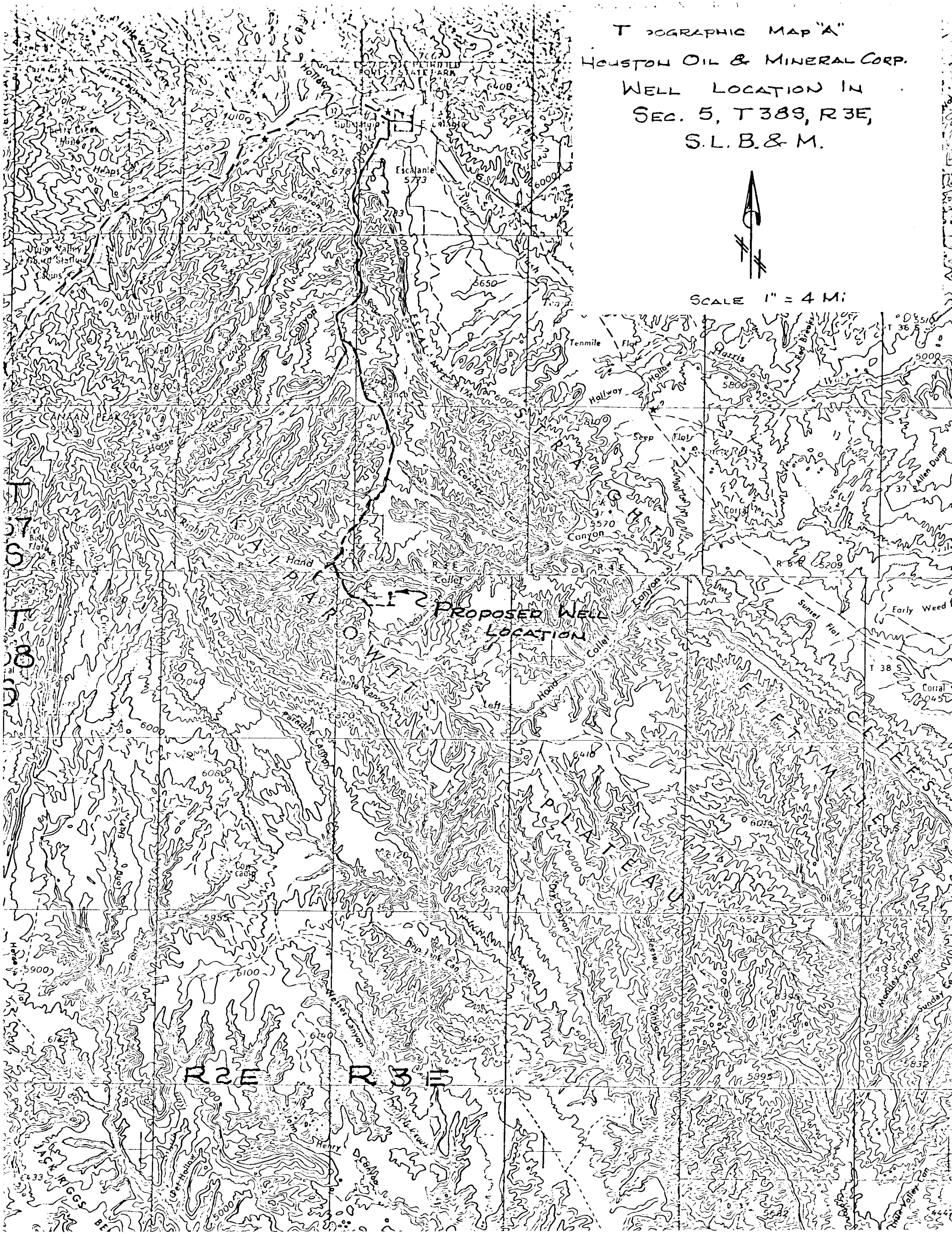
Relishen Seep

Big Sage

Long Canyon

TRAIL

Escala



Topographic Map "A"
Houston Oil & Mineral Corp.
Well Location In
Sec. 5, T38S, R3E,
S.L.B.& M.
Scale 1" = 4 Mi
Proposed Well Location
Escalante
5773
Straight Cliffs
Kaiparowits Plateau
Fiftymile Cliffs
Tenmile Flat
Hallway
Harris
Seep Flat
Sunset Flat
Early Weed
Canaan Peak
Right Hand
Collet
Left Hand
Collet Canyon
Escalante Canyon
Paradise Canyon
Dry Canyon
Reese Canyon
Monday Canyon
Sunday
Wesses Canyon
Drip Tank Can
John Henry
Jack Riggs Bench
R 2 E
R 3 E
R 4 E
R 5 E
R2E
R3E
T 36 S
T 37 S
T 38 S
Corral
Allen Dump
Oil well
Horse
Spring
Mitchell Canyon
Main Canyon
Upper Valley
Pine Creek
Henrieville Creek
Cottonwood
Fiftymile

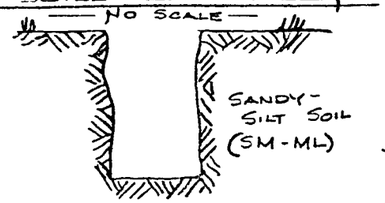
LOCATION LAYOUT SHEET

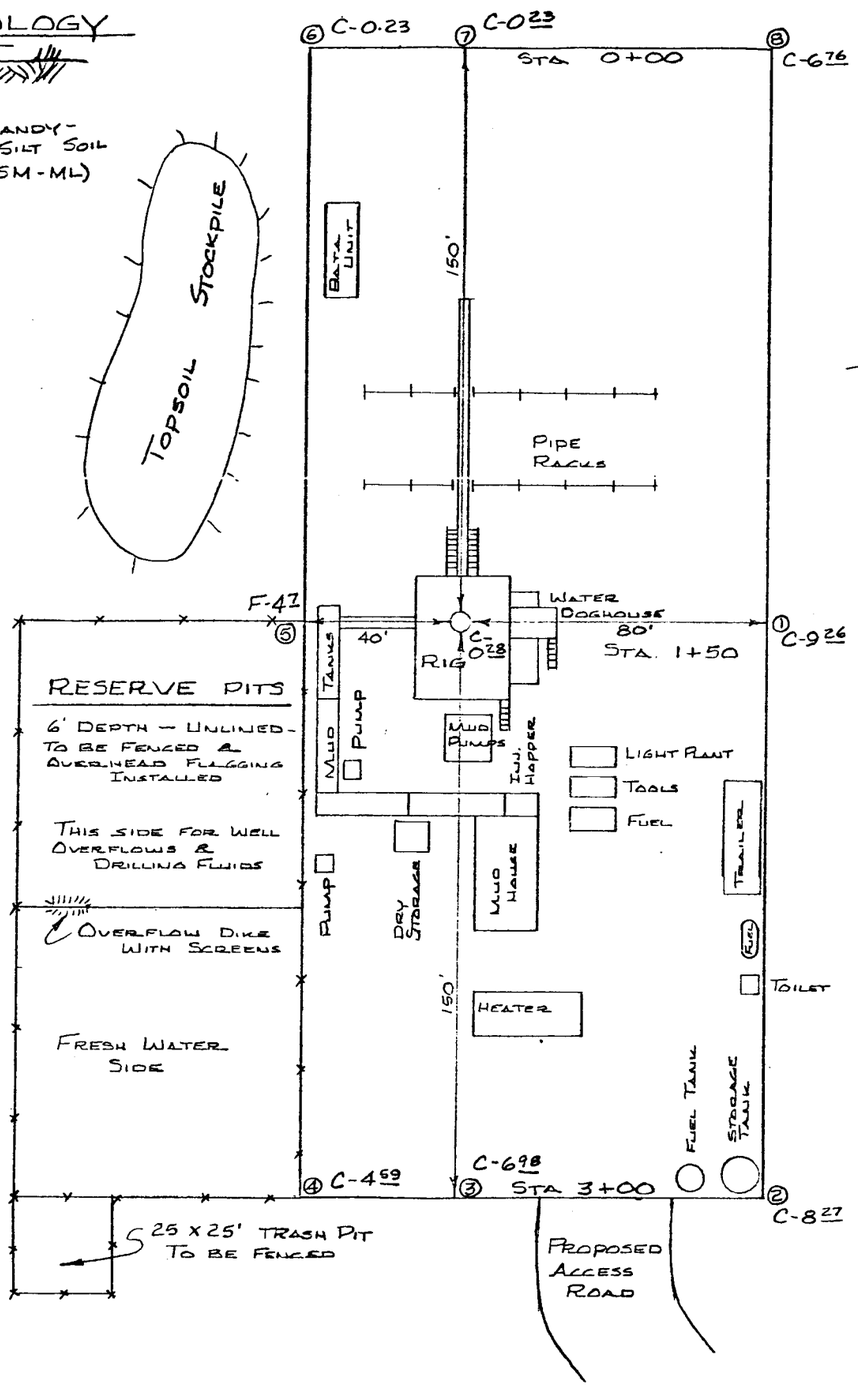
HOUSTON OIL & MINERAL CORP.

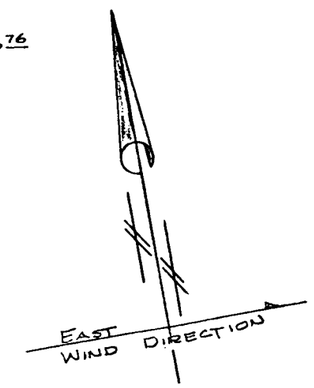
LOCATED IN THE SE1/4 SE1/4 SEC. 5, T38S, R3E, S.L.B.& M. KANE COUNTY, UT.

SOILS LITHOLOGY

NO SCALE





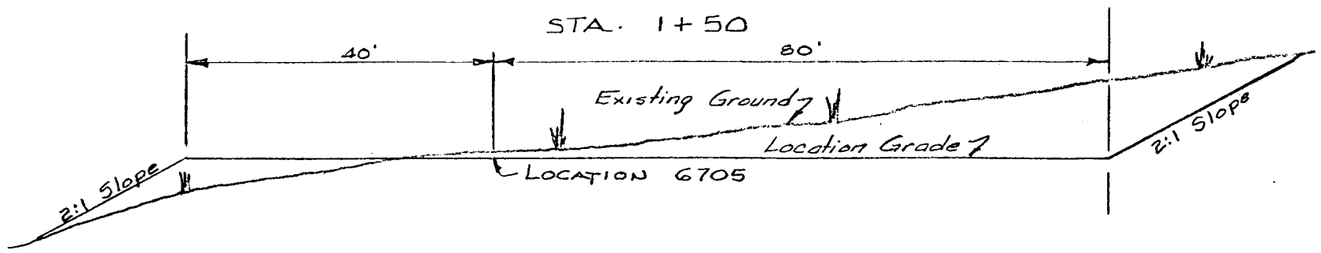


SCALE: 1" = 40'

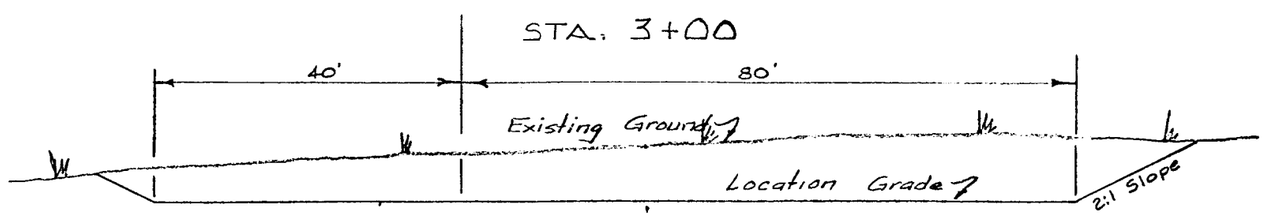
CROSS SECTIONS

STA. 0+00

STA. 1+50



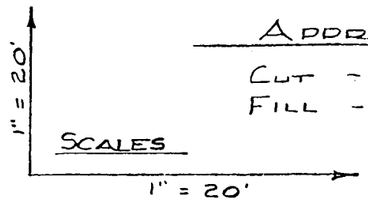
STA. 3+00



APPROX. YARDAGES

CUT - 6524 Yds.

FILL - 576 Yds.



Ten Point Program for
Houston Oil & Minerals Federal 44-5
Kane County, Utah

1. Surface Formation: Wahweap

2. Estimate tops of important geologic markers:

   Tropic - 1450'
   Dakota - 2000'
   Navajo - 3900'
   Chinle - 5900'
   Shinarump - 6400'
   Moenkopi - 6600'
   Kaibab - 7300'
   Cedar Mesa - 8250' (est.)

3. Estimated depths where water, oil, or gas is anticipated:

   Cedar Mesa - 8250' - oil

4. Surface casing:

   3000' - 9-5/8", 36.0#, K-55, LT&C (new)

   Production casing:

   7", 23# and 26#, set at 9000' (K-55, LT&C; new).

5. Blowout prevention: Rotating head and two ram type - 14" Shaeffer 1500 Series BOP's. Blind and pipe rams for each size of casing and drill pipe will be provided. Proper fill, kill, and choke manifolding will be utilized. BOP's will be tested to 3000 psi prior to drilling out from under surface casing, and will then be tested as per minimum State and Federal safety requirements (see attachment for BOP stack schematic).

6. The drilling fluid to be utilized will be a controlled low solids/non dispersed fresh water mud. Air will be pumped down the parasite string. Sufficient quantities of mud and barite will be on location at all times; the nearest stockpoint is Escalante, Utah.

7. Auxiliary equipment to be used as follows:

   a. kelly cocks
   b. floats at the bit
   c. mud monitoring system (when mud is utilized)
   d. a full opening - quick close drill pipe valve, to be located on the derrick floor at all times.

8. Evaluation: Three fifty foot cores are anticipated in the porous intervals of the Shinarump at 6900', Kaibab at 7300', and Cedar Mesa at 8200'. No DST's are anticipated. A mud logger will be employed from 3000' to TD.

to analyze drilling samples. The well will be logged at TD with the following logs:

DIL/LL8	7450' - TD
BHC/Sonic	7450' - TD
CNL/FDC	7450' - TD

9. No abnormal pressures or temperatures are anticipated, and no potential hazards such as H_2S gas are expected. A rotating head will be utilized to divert any drilled gas away from the rig. All necessary safety measures will be followed, in an effort to prevent any possible dangers.

10. Anticipated starting date: February 20, 1977.

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: Jan. 13 -

Operator: Houston Oil & Minerals

Well No. Federal 44-5

Location: Sec. 5 T. 38S R. 3E, County: Kane

File Prepared	✓	Entered on N.I.D.	✓
Card Indexed	✓	Completion Sheet	✓

Checked By:

Administrative Assistant: JW

Remarks: No other wells in Sec.

Petroleum Engineer: OK Pat

Remarks: offsetting 44-9

Director: ✓

Remarks:

Include Within Approval Letter:

Bond Required ~~Not~~ ☐ Survey Plat Required ☐

Order No. _____ ☐ Surface Casing Change ☐
to _____

Rule C-3(c), Topographical exception/company owns or controls acreage within a 660' radius of proposed site ☐

O.K. Rule C-3 ~~X~~ O.K. In _____ Unit ☐

Other:

☑ Letter Written

January 14, 1977

Houston Oil & Minerals Company
1700 Broadway - Suite 504
Denver, Colorado 80290

Re: Well No's:
Federal 44-5, 526' FSL & 729' FEL
Sec. 5, T. 38 S, R. 3 E,
Federal 44-30, 660' FSL & 520' FEL
Sec. 30, T. 37 S, R. 3 E,
Kane County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with the General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon these wells, you are hereby requested to immediately notify the following:

PATRICK L. DRISCOLL - Chief Petroleum Engineer
HOME: 582-7247
OFFICE: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

The API numbers assigned to these wells are:

Federal 44-5: 43-025-30017 Federal 44-30: 43-025-30018

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: U-19237-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [x] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [ ] OTHER — SINGLE ZONE [x] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Federal

2. NAME OF OPERATOR: Houston Oil & Minerals Corporation

9. WELL NO.: 44-5

3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 504, Denver, Colorado 80290

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 526' FSL and 729 FEL, Sec. 5-T38S-R3E
At proposed prod. zone: same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 5-T38S-R3E

RECEIVED
JUN 6 1977
DIVISION OF OIL, GAS, & MINING

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 24 miles south of Escalante, Utah

12. COUNTY OR PARISH: Kane — 13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
526'	160	160
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
N/A	9000'	rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6705' (Ungraded Ground Elevation)

22. APPROX. DATE WORK WILL START*: February 20, 1977

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
30"	20"	94.0#	75'	100 sx.
14-3/4"	9-5/8"	36.0#	3000'	2000 sx.
8-3/4"	7"	23#, 26#	9000'	700 sx.

Set 13-3/8" conductor casing, circulate cement to surface, install BOP's. Drill to 2500' with native mud and set 9-5/8" surface casing with 1-1/4" parasite string; nipple up with 14" Series 1500 double hydraulic ram type BOP and rotating head, with necessary choke manifold. Pressure test to 3000 psi. No high pressures are anticipated, however, the minimum safety requirements for the state of Utah and USGS will be followed.

Drill to approximately 9000', using air as far as possible, then mud up with a low solids, non-dispersed system, utilizing the parsite string (to lighten hydrostatic column and prevent lost circulation). Mud logging and sample anlysis will be utilized from surface to TD, with cores and DST's taken where necessary to properly evaluate any potentially productive zones (see attachment for estimated formation tops).

Approval Letter - 6-6-77

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

24.

SIGNED Ronald D. Scott — TITLE District Drilling Engineer — DATE January 8, 1977

Ronald D. Scott

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY (ORIG. SGD.) E. W. GUYNN — TITLE DISTRICT ENGINEER — DATE JUN 03 1977

CONDITIONS OF APPROVAL, IF ANY:

SUMMARY OF ENVIRONMENTAL IMPACT EVALUATION EIA #366

ATTACHMENT 2-A
LEASE #U-19237-A
HOUSTON OIL & MINERALS
FED. # 44-5
SECT. 5 T38S R3E
KANE COUNTY, UTAH

G.S. UM DENNIS
BLM DEERY
HOUSTON Oil M. R. SCOTT
m/e ADAMS

[0] ENHANCES
[ ] NO IMPACT
[/] MINOR IMPACT
[X] MAJOR IMPACT

		Construction				Pollution				Drilling Production					Transport Operations			Accidents		Others
		Roads, bridges, airports	Transmission lines, pipelines	Dams & impoundments	Others (pump stations, compressor stations, etc.)	Burning, noise, junk disposal	Liquid effluent discharge	Subsurface disposal	Others (toxic gases, noxious gas, etc.)	Well drilling	Fluid removal (Prod. wells, facilities)	Secondary Recovery	Noise or obstruction of scenic views	Mineral processing (ext. facilities)	Others	Trucks	Pipelines	Others	Spills and leaks	Operational failure	
Land Use	Forestry	/	/	/	/		/	/		/	/	/	/	/		/	/		/	/	
	Grazing	/	/	/	/		/	/		/	/	/	/	/		/	/		/	/	
	Wilderness	/	/	/	/		/	/		/	/	/		/		/	/		/	/	
	Agriculture N/A																				
	Residential-Commercial N/A																				
	Mineral Extraction	/		/	/		/	/			/	X	/			/	X		/	/	
	Recreation	/	X	/	/		/	/		/	/	/	/			/	/		/	/	
	Scenic Views	/	/	/	/		/	/		/	/	/	/			/	/		/	/	
	Parks, Reserves, Monuments	/	X	/	/		/	/		/	/	/	/			/	/		/	/	
	Historical Sites N/A																				
	Unique Physical Feat. N/A																				
Flora & Fauna	Birds	/	/	/	/		/	/		/	/	/		/		/	/		/	/	
	Land Animals	/	/	/	/		/	/		/	/	/		/		/	/		/	/	
	Fish	/	/	/	/		/	/		/	/	/		/		/	/		/	/	
	Endangered Species N/A				NO KNOWN ENDANGERED SPECIES																
	Trees, Grass, Etc.	/	/	/	/		/	/		/	/	/		/		/	/		/	/	
Phy. Charact.	Surface Water	/	/	/	/		/	/		/	/	/		/		/	/		/	/	
	Underground Water	/	/		/		/	/		/	/	/		/		/	/		/	/	
	Air Quality	/	/	/	/		/	/		/	/	/		/		/	/		/	/	
	Erosion	/	/	/	/		/	/		/	/	/		/		/	/		/	/	
	Other																				
	Effect On Local Economy	/	[redacted]	/			/	/		/	/	/		/		[redacted]	[redacted]		/	/	
	Safety & Health	/	/	/	/		/	/		/	/	/		/		/	/		/	/	
	Others Orig - File																				

cc: Reg - Denver
BLM - Cedar City
DOGM - Utah

Lease U-19227-A

Well No. & Location FED. # 44-5 SECT. 5 T38S R3E

KANE COUNTY, UTAH

ENVIRONMENTAL IMPACT ANALYSIS - ATTACHMENT 2-B

1. Proposed Action

PROPOSES TO DRILL AN OIL AND GAS TEST WELL WITH ROTARY TOOLS TO ABOUT 9000 FT. TD. 2) TO CONSTRUCT A DRILL PAD 120 FT. X 300 FT. AND A RESERVE PIT 80 FT. X 150 FT. 3) TO CONSTRUCT FT. X MILES ACCESS ROAD AND UPGRADE FT. X MILES ACCESS ROAD FROM AN EXISTING AND IMPROVED ROAD.

2. Location and Natural Setting (existing environmental situation)

THIS LOCATION IS ON A PLATEAU THAT RISES ABOVE RIGHT HAND COLLET CANYON. THE AREA IS SEMI-ARID AND CONSISTS OF A LIGHT YELLOW-GRAY SOILS WITH POORLY GRADED GRAVELS.

THE VEGETATION IN THE AREA CONSISTS OF JUNIPER AND PINION PINE WITH SAGEBRUSH, RABBIT BRUSH, SOME GRASS AND CACTI.

FAUNA CONSISTS OF MULE DEER, COYOTES, RABBITS, VARIETIES OF SMALL GROUND SQUIRRELS & OTHER RODENTS.

THIS AREA IS USED PRIMARELY FOR GRAZING LIVESTOCK.

BIRDS IN THE AREA ARE HAWKS, FINCHES, GROUND SPARROWS, MAGPIES, CROWS, AND JAYS.

THE IMMEDIATE AREA SURROUNDING THE LOCATION SITE HAS BEEN CHAINED TO REMOVE THE PINION & JUNIPAR TREES AND HAS BEEN RESEEDED WITH CRESTED WHEAT GRASSES.

THE WELL SITE DROPS OFF into A LARGE DRAINAGE AREA TO THE NORTH AND CIRCLES THE PLATEAU TO THE WEST AND SOUTH - THIS WOULD REQUIRE AN EIGHT (8') CUT INTO THE SIDE OF THE LOCATION AND WOULD NOT ALLOW SUFFICIENT ROOM FOR PITS - THEREFOR WELLSITE WAS MOVED 180' TO THE SOUTH AND DRILL PAD WAS ROTATED TO RUN [redacted] EAST & WEST. THIS ACTION WAS (IN MY ESTIMATION) NECESSARY TO ALLOW MIN. IMPACT ON THE ENVIRONMENT AND TO ALLOW FOR SAFER OPERATION. LOCATION WOULD THEN BE 346 FSL 729 FEL SEC. 5 T38S R3E

3. Effects on Environment by Proposed Action (potential impact)

1) EXHAUST EMIS NS FROM THE DRILLING RIG POWE 'ITS AND SUPPORT TRAFFIC ENGINES WOULD ADD MINOR POLLUTION TO THE ATMOSPHERE IN THE LOCAL VICINITY.

2) MINOR INDUCED AND ACCELERATED EROSION POTENTIAL DUE TO SURFACE DISTURBANCE AND SUPPORT TRAFFIC USE.

3) MINOR VISUAL IMPACTS FOR A SHORT TERM DUE TO OPERATIONAL EQUIPMENT AND SURFACE DISTURBANCE.

4) TEMPORARY DISTURBANCE OF WILDLIFE AND LIVESTOCK.

5) MINOR DISTRACTION FROM AESTHETICS FOR SHORT TERM.

6)

4. Alternatives to the Proposed Action

1) NOT APPROVING THE PROPOSED PERMIT -- THE OIL AND GAS LEASE GRANTS THE LESSEE EXCLUSIVE RIGHT TO DRILL FOR, MINE, EXTRACT, REMOVE AND DISPOSE OF ALL OIL AND GAS DEPOSITS.

2) DENY THE PROPOSED PERMIT AND SUGGEST AN ALTERNATE LOCATION TO MINIMIZE ENVIRONMENTAL IMPACTS.

3) LOCATION WAS MOVED 180' TO THE SOUTH OF THE PROPOSED LOCATION SITE TO ELIMINATE UNNECESSARY CUTS IN THE GROUND STRUCTURE AND TO ALLOW MORE ROOM FOR ADITIONAL PITS, IF NECESSARY.

5. Adverse Environmental Effects Which Cannot Be Avoided

1) MINOR AIR POLL_ _ON DUE TO EXHAUST EMISSIONS FR_ _RIG ENGINES AND SUPPORT TRAFFIC ENGINES.

2) MINOR INDUCED AND ACCELERATED EROSION POTENTIAL DUE TO SURFACE DISTURBANCE AND SUPPORT TRAFFIC USE.

3) MINOR AND TEMPORARY DISTURBANCE OF WILDLIFE.

4) TEMPORARY DISTURBANCE OF LIVESTOCK.

5) MINOR AND SHORT-TERM VISUAL IMPACTS.

6)

6. Determination

(This requested action (~~is~~) (does not) constitute a major Federal action significantly affecting the environment in the sense of NEPA, Section 102(2) (c).

Date Inspected 1-24-77

Inspector

E. W. Guynn

U.S. Geological Survey,
Conservation Division
Salt Lake City District
Salt Lake City, Utah

U.S. GEOLOGICAL SURVEY, CONSERVATION DIVISION

FROM: DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, SALT LAKE CITY, UTAH

Well	Location	Lease No.
Houston O&M Corp. #44-5	526 FSL, 729 FEL, sec. 5, T. 38 S., R. 3 E., SLM, Kane Co., Utah	U-19237A

1. Stratigraphy and Potential Oil and Gas Horizons. Proposed to TD of 9,000' will collar in Wahweap Sandstone and test through (into) the Cedar Mesa Sand. Estimated definitive tops are 100' ± Straight Cliffs SS; 2,000' - Dakota; 3,900' - Navajo SS; 5,900' - Chinle; 6,600' - Moenkopi; 7,300' - Kaibab lms; 8,250' Cedar Mesa SS (member of Cutler Fm).

2. Fresh Water Sands. Fresh water possible in Wahweap - Straight Cliffs rocks.

3. Other Mineral Bearing Formations. (Coal, Oil Shale, Potash, Etc.) Commercial beds of coal may be penetrated within the Straight Cliffs and the Dakota Formations.

4. Possible Lost Circulation Zones. Shinarump and Kaibab basally susceptible to lost circulation.

5. Other Horizons Which May Need Special Mud, Casing, or Cementing Programs. No data

6. Possible Abnormal Pressure Zones and Temperature Gradients. Only normal to depth and $\frac{\rightarrow}{g,l}$ T, P conditions are anticipated

7. Competency of Beds at Proposed Casing Setting Points. Probably adequate for program.

8. Additional Logs or Samples Needed. APD logging program is adequat.

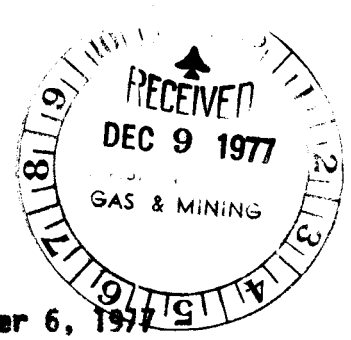
9. References and Remarks USGS Files, SLC, UT.

Date: 02-03-77 Signed: Donald C Alvord

State Oil & Gas

Location Abandoned P&A

Conservation Division
8440 Federal Building
Salt Lake City, Utah 84138



December 6, 1977

Mr. Ronald D. Scott
Houston Oil & Minerals Corporation
Suite 504, 1700 Broadway
Denver, Colorado 80290

Houston Oil & Minerals

Re: Well No. 44-5
SE¼ SE¼, Sec. 5, T.38S, R.3E
Kane County, Utah
Lease Utah 19237-A

Dear Mr. Scott:

Reference our telecon and your subsequent letter dated November 28, 1977, wherein you stated that you were abandoning the subject location and would like to have this Application for Permit to Drill revoked, we are therefore revoking the Application effective as of this date without prejudice.

Any surface disturbance associated with this approved Application must be restored in accordance with the approved Surface Use Plan prior to release of bonding.

If you should again desire to drill at this location, please submit a new Application for Permit to Drill.

Sincerely yours,

(Orig. Sgd.) E. W. Guynn

E. W. Guynn
District Engineer

bcc: Chief, Br. L & M-BLM, SLC
Utah State OGM
BLM, Escalante
O&GS, NRMA, Casper
USGS, Vernal
Well file

tw