

P-W

WESTERN HELIUM #1 INDIAN  
SE NW Sec. 30-T20N-R28E APACHE CO. 552

COUNTY Apache AREA 10 mi. SE/Navajo LEASE NO. Noo-C-14-20-2352-2601-2602

WELL NAME Western Helium Corporation #1 Indian

LOCATION SE/NW SEC 30 TWP 20N RANGE 28E FOOTAGE 1650 FNL - 1650 FWL

ELEV 5827 GR 5832 KB KB SPUD DATE 4-22-71 STATUS P&A TOTAL COMP. DATE 6-11-71 DEPTH 1310

*5818 GL from USGS 7 1/2' grad per JNC*  
CONTRACTOR Eastern Petroleum Company

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY	<u>X</u>
<u>7"</u>	<u>287</u>	<u>100 sx</u>		DRILLED BY CABLE TOOL	
<u>5 1/2"</u>	<u>457</u>	<u>100 sx</u>		PRODUCTIVE RESERVOIR	<u>Shinarump</u>
				INITIAL PRODUCTION	<u>Dry Hole</u>

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
<u>Chinle</u>	<u>365</u>	<u>X</u>		
<u>Sonsela "A"</u>	<u>464</u>		<u>X</u>	
<u>Lower Pet. For.</u>	<u>516</u>		<u>X</u>	
<u>Monitor Butte</u>	<u>1154</u>		<u>X</u>	
<u>Shinarump</u>	<u>1218</u>		<u>X</u>	
<u>Moenkopi</u>	<u>1270</u>	<u>X</u>	<u>X</u>	

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG	<u>X</u>
<u>I.E.</u>			SAMPLE DESCRP.	<u>X</u>
			SAMPLE NO.	<u>1669</u>
			CORE ANALYSIS	<u>None</u>
			DSTs	<u>None</u>

REMARKS	APP. TO PLUG	<u>X</u>
	PLUGGING REP.	<u>X</u>
	COMP. REPORT	<u>X</u>

WATER WELL ACCEPTED BY \_\_\_\_\_

BOND CO. The Travelers Indemnity Company BOND NO. 1674375  
 BOND AMT. \$ 25,000 CANCELLED \_\_\_\_\_ DATE \_\_\_\_\_  
 ORGANIZATION REPORT 11-10-70  
 FILING RECEIPT 2886 LOC. PLAT X WELL BOOK X PLAT BOOK X  
 API NO. 02-001-20139 DATE ISSUED 4-20-71 DEDICATION All of Sec 30

PERMIT NUMBER 552

DRILL STEM TEST

NO.	FROM	TO	RESULTS

CORE RECORD

NO.	FROM	TO	RECOVERY	REMARKS

REMEDIAL HISTORY

DATE STARTED - COMPLETED	WORK PERFORMED	NEW PERFORATIONS

ADDITIONAL INFORMATION

### WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

New Well  Work-Over  Deepen  Plug Back  Same Reservoir  Different Reservoir  Oil  Gas  Dry

DESCRIPTION OF WELL AND LEASE

Operator Western Helium Corporation		Address P.O. Box 1358 Scottsdale, Arizona	
Federal, State or Indian Lease Number or name of lessor if fee lease Indian N00-C-14-20-2352 # 2601 2602		Well Number 1	Field & Reservoir SANT Flat Springs
Location 1650 FNL & 1650 FWL		County Apache	
Sec. TWP-Range or Block & Survey Section 30- T20N - R28E			
Date spudded 4/22/71	Date total depth reached 6/11/71	Date completed, ready to produce	Elevation (D.F., RKB, RT or Gr.) feet 5827 GR
Elevation of casing hd. flange feet 5832 RB		Total depth 1310	
P.E.T.D.		Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for each completion.
Producing interval (s) for this completion Dry Hole		Rotary tools used (interval) 0-1310	Cable tools used (interval) 0
Was this well directionally drilled? No	Was directional survey made? No	Was copy of directional survey filed?	Date filed
Type of electrical or other logs run (check logs filed with the commission) Induction			Date filed

CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled
7"		287		287	100 sx	0
5 1/2"		454		457	100 sx	0

TUBING RECORD

LINER RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
None in.	ft.	ft.	in.	ft.	ft.		

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth interval	Amt. & kind of material used	Depth interval
None			None	

INITIAL PRODUCTION

Date of first production None		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump): Dry Hole				
Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)
Tubing pressure	Casing pressure	Cal'ed rate of Production per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio

Disposition of gas (state whether vented, used for fuel or sold):

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Secretary of the Western Helium Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date 6/23/71 Signature [Handwritten Signature]

RECEIVED

JUN 25 1971

Permit No. 552

O & G CONS. COMM.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
Well Completion or Recompletion Report and Well Log  
File One Copy

Form No. 4

**DETAIL OF FORMATIONS PENETRATED**

Formation	Top	Bottom	Description*

\* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

**INSTRUCTIONS:**

Attach driller's log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Gas Conservation Commission not later than thirty days after project completion.

Form No. 4



**APPLICATION TO ABANDON AND PLUG**

FIELD Salt Springs Well

OPERATOR Western Helium Corporation ADDRESS P.O. Box 1358 Scottsdale, AZ  
 Federal, State, or Indian Lease Number Indian #N00-C-14-20-2352 WELL NO. WHC #1 Indian  
 or Lessor's Name if Fee Lease 2601  
2602

LOCATION 1650 FNL & 1650 FWL  
Section 30 - T20N - R28E

TYPE OF WELL Dry Hole TOTAL DEPTH 1310  
(Oil, Gas or Dry Hole)

ALLOWABLE (If Assigned) \_\_\_\_\_

LAST PRODUCTION TEST OIL \_\_\_\_\_ (Bbls.) WATER \_\_\_\_\_ (Bbls.)  
 GAS \_\_\_\_\_ (MCF) DATE OF TEST \_\_\_\_\_

PRODUCING HORIZON \_\_\_\_\_ PRODUCING FROM \_\_\_\_\_ TO \_\_\_\_\_

1. COMPLETE CASING RECORD.

7" csq	287'	100 sx
5½ csq	454'	100 sx

2. FULL DETAILS OF PROPOSED PLAN OF WORK.

1. Leave all pipe in hole
2. 100' plug 1100' - 1200'
3. 50' plug 454 - 504
4. Surface plug 0' - 10'

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 JUN 25 1971  
 O & G CONS. COMM.

DATE COMMENCING OPERATIONS June 14, 1971

NAME OF PERSON DOING WORK Eastern Petroleum Co. ADDRESS P.O. Box 291 Carmi, Ill.

*Lawrence A. Hall*  
Signature

Secretary

Title \_\_\_\_\_

Address P.O. Box 1358 Scottsdale, Arizona

Date June 23, 1971

Date Approved 6-25-71

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION

By: *W.B. [Signature]*

STATE OF ARIZONA  
 OIL & GAS CONSERVATION COMMISSION  
 Application to Abandon and Plug  
 File Two Copies

Farm No. 9

Permit No. 552

**OPERATOR'S CERTIFICATE OF COMPLIANCE AND AUTHORIZATION  
TRANSPORT OIL OR GAS FROM LEASE**

Federal, State or Indian Lease Number, or lessor's name if fee lease Navajo Tribal "O" 14-20-603-716	Field Teec Nos Pos, Ismay	Reservoir Paradox
Survey or Sec-Twp-Rge Sec. 23, T41N, R30E	County Apache	State Arizona
Operator Energy Reserves Group, Incorporated		
ADDRESS ALL CORRESPONDENCE CONCERNING THIS FORM TO:		
Street P.O. Box 3280	City Casper	State Wyoming 82601
Above named operator authorizes (name of transporter) Plateau, Incorporated		
Transporter's street address Box 108	City Farmington	State New Mexico 87401
Field address		
Oil, condensate, gas well gas, casinghead gas		
To transport	100 % of the	Oil from said lease.
OTHER GATHERERS TRANSPORTING FROM THIS LEASE ARE AS FOLLOWS:		
Name of gatherer El Paso Natural Gas Company	% transported 100%	Product transported Gas
Indicate whether or not this certificate is for a new lease. If not a new lease, indicate whether or not it is a change of operator, change of lease name, change of gatherer, or a consolidation or subdivision of leases and give effective date of change. Effective 2-11-76, Energy Reserves Group, Incorporated is the new name for Clinton Oil Company		

The undersigned certifies that the rules and regulations of the State of Arizona Oil & Gas Conservation Commission have been complied with in drilling and producing operations on this lease, except as noted above, and that the above transporter is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property, and that this authorization will be valid until further notice or until cancelled by the State of Arizona Oil & Gas Conservation Commission.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the District Clerk of the Energy Reserves Group, Inc. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date March 29, 1976

Terrence L. Ruder  
Signature

Date approved: 4-1-76

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

By: W.B. Oke

Permit No. 232 (582) 640

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APR 19 1976

O & G CONS. COMM.  
STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
Operator's Certificate of Compliance & Authorization to  
Transport Oil or Gas from Lease  
File Two Copies  
Form No. 8

Letter from Rob M. Collier  
 Acting Chief  
 Western Mapping Center  
 Topographic Div.  
 345 Middlefield Rd.  
 Menlo Park, Calif. 94025

Dated: October 3, 1974

NAVAJO SPRINGS

Well	Elevations		Differ- ence	Remarks
	Photog.	Bull. 185		
✓ Eastern 21 (234) 20n-28e-31	5853 <sup>gl</sup>	<del>5832</del>	-21	Well identified at end of road on photo.
OK → ✓ Western (552)   Fredizn 20n-28e-30	5818 <sup>gl</sup>	<del>5800</del>	-18	Bulletin 185 position would place well on opposite side of road.
✓ CREST 471   Santa Fe Eastern 2 (547) 20n-28e-25 660 FSL-660 FEL	5821	<del>5773</del> 5820 <sup>gl</sup> <i>agrees</i>	<del>-46</del>	Image on photo at end of road and pipe line.

NAVAJO SOUTH

✓ Kerr-McGee 2 (39) ✓ 20n-26e-35 660 FSL-1320 FWL	± 5668 <sup>gl</sup>	<del>5662<sup>gl</sup></del>	-6	Well identified at end of road.
✓ Kerr-McGee (36) ✓ 20n-26e-34 2175 FSL-1700 FEL	± 5779 <sup>gl</sup>	<del>5772<sup>gl</sup></del>	-7	Well identified at end of road.
✓ Kerr-McGee (10) 20n-26e-33 330 FSL-230 FEL	± 5743 <sup>gl</sup>	5743 <sup>gl</sup> <i>agrees</i>	0	Well identified at U-bend in road.
✓ Linehan (136) 20n-26e-21 330 FSL-2310 FE	± 5605 <sup>gl</sup>	5600 <sup>gl</sup>	-5	1500 feet from BM.
✓ Kerr-McGee (37) 19n-26e-4 2310 FSL-1650 FEL	± 5770 <sup>gl</sup>	<del>5753</del>	-17	Well identified at end of road.
✓ Kerr-McGee 1 (167) 19n-26e-14 500 FSL-1320 FWL	± 5741 <sup>gl</sup>	5760	+19	Located in a small clearing 350 feet off road.
Kerr-McGee 1A (177) 19n-26e-14 500 FSL-1290 FWL	Not Plotted 5738 <sup>gl</sup>	5776		This point is 100 feet down slope from 167 yet elevation indicates it is higher.

(\* Interpolated)

The "Remarks" column gives justification for our confidence in the fieldman's location of the wells.

August 23, 1971

Mr. Allen:

Yes, samples from the Western Helium, #1 Indian  
have been received and will be sent to you  
later this month.

*J. Ratcliff*  
Four Corners Sample Cut

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AUG 24 1971

O & G COAL CO.



CORING DATA: No cores were taken. The sample quality was fair to good from surface to total depth (1310 feet).

Samples were taken to Four Corners Sample Assoc. in Farmington, New Mexico for storage and distribution.

DRILL-STEM TEST DATA: No drill stem tests were taken.

COMMENTS: The No. 1 Indian Allotted well was drilled to test the Coconino sandstone. When it was discovered that structurally it was running lower than the surrounding wells it was decided to test only the Shinarump congl. and see if it was productive.

Log analysis showed it to be completely water bearing.

A water sample from the Shinarump congl. in the Ancon-21 well (Sec. 31-20N-28E) had a measured resistivity of 0.838 ohms @ 75°F.

DURANGO, COLORADO

GEOLOGIST

ROBERT E. LAUTH



RECOMMENDATION: On the basis of sample cutting examination, electrical-induction log analysis & physical property (thinning of mud due to water in Shinarump), it was recommended that the well be plugged and abandoned.

Comment: Considerable time was lost due to heavy bentonite harden-  
countered and minor but annoying breakdowns of the rig. This coupled  
with a great distance from repair parts and supplies added greatly  
to down and lost time.

DRILLING IN DATA: The well was plugged and abandoned June 14, 1971.  
Verbal permission to plug was received from both the Arizona Oil &  
Gas Conservation Commission in Phoenix, Arizona and the United  
States Geological Survey in Farmington, New Mexico on June 11, 1971.

Plugging was as follows:

- 1) All existing pipe left in hole
- 2) 100 foot plug on top of Shinarump cong. 1100 to 1200' - 15 sx
- 3) 50 foot plug base surface pipe 454 to 504' - 7 sx
- 4) Surface plug 0 - 10 feet . . . . . 2 sx
- 5) A 4 foot, 4 inch iron monument erected with name, legal description and elevation weld beaded to it.
- 6) Pits to be filled in by surface owner, C. G. Wallace.

This well adequately tested all formations penetrated.

Respectfully submitted,

*Robert E. Lauth*

Robert E. Lauth  
AIPG No. 1366, AAPG No. 707  
Durango, Colorado  
June 16, 1971

DURANGO, COLORADO

GEOLOGIST

ROBERT E. LAUTH

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*  
(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.5

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input checked="" type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. N00-C-14-20-2352	
b. TYPE OF COMPLETION: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Ush-Ka-Ha-De-Ya-e No. 10002	
2. NAME OF OPERATOR Western Helium Corporation		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR P.O. Box 1353 Scottsdale, Arizona 85251		8. FARM OR LEASE NAME Indian Allotted	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1650 FNL ; 1650 FWL At top prod. interval reported below " " At total depth " "		9. WELL NO. 1	
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT Wildcat	
DATE ISSUED 4/23/71		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA 30-20N-29E	
15. DATE SPUNDED 4/22/71		12. COUNTY OR PARISH Apache	
16. DATE T.D. REACHED 6/11/71		13. STATE Arizona	
17. DATE COMPL. (Ready to prod.) 6/11/71		18. ELEVATIONS (OF, RKB, RT, OR, ETC.)* 5827 G.D.	
19. ELEV. CASINGHEAD 5832 RB		23. INTERVALS DRILLED BY 0-1310	
20. TOTAL DEPTH, MD & TVD 1310		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* Dry Hole	
21. FLUD, BACK T.D., MD & TVD		25. WAS DIRECTIONAL SURVEY MADE No	
22. IF MULTIPLE COMPL., HOW MANY*		26. TYPE ELECTRIC AND OTHER LOGS RUN Induction	
27. WAS WELL CORED No		28. CASING RECORD (Report all strings set in well)	
29. LINER RECORD		30. TUBING RECORD	
31. PERFORATION RECORD (Interval, size and number) None		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. None	
33. PRODUCTION		34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)	
35. LIST OF ATTACHMENTS		36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records	

SIGNED J. A. Hall TITLE Secretary DATE 6/23/71

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

RECEIVED  
JUN 25 1971  
O & G CONS. COMM.



Form 9-331  
(May 1963)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate  
(Other instructions on  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

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  Dry Hole

2. NAME OF OPERATOR  
Western Helium Corporation

3. ADDRESS OF OPERATOR  
P.O. Box 1358 Scottsdale, Arizona 85252

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface  
1650 FNL ; 1650 FWL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5827 GR

5. LEASE DESIGNATION AND SERIAL NO.  
N00-G-14-20-2352

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Ush-Ka-Ha-De-Ya-ve  
No. 10002

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Indian Allotted

9. WELL NO.  
1

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC. T. R. S. M. OR B.L.R. AND SURVEY OR AREA  
30-120N-R28E

12. COUNTY OR PARISH  
Apache

13. STATE  
Arizona

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input checked="" type="checkbox"/> Plugging Report	
(Other) <input type="checkbox"/>		(Note: Report results of multiple completion on 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 nodes pertinent to this work.)\*

Well plugged as follows with verbal permission given on  
June 14, 1971.. Workeperformed on June 14, 1971.

1. All pipe left in hole
2. 1100' - 1200' cement 15 sx
3. 454' - 504' cement 7 sx
4. 0 - 10' cement 2 sx
5. Iron, monument erected

Not Erected 6/14-71

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G.S. CONS. COMM.

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

SIGNED [Signature] TITLE Secretary

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

June 11, 1971

Memo to Western Helium Corporation #1 Indian  
SE/4 NW/4 Section 30-T20N-R28E  
Apache County  
Our File #552

Memo from W. E. Allen

Bob Haas (?) called this date for permission to plug the above referenced well. Total depth of this well is 1310'. 5-1/2" casing is set at 446' and cement has been circulated. Top of the Shinarump is 1218'. The Coconino is not penetrated. A 100' cement plug will be set from 1280' to 1180'. Heavy mud from 1180' to 20'. A 20' cement plug with a regulation dry hole marker will be placed on top of the 5-1/2" casing.

RECORD OF SAMPLE DESCRIPTION

PAGE NO. 1

SEC. 30 TWP. 20N RGE. 28E LOCATION 1650 FNL; 1650 FWL  
 FARM Indian Allotted NO. 1 ELEVATION 5827 Gr. 5832 KB  
 OWNER Western Helium Corporation STATE Arizona COUNTY Apache  
 SAMPLES FROM 0 TO 340 EXAMINED BY R.E. Lauth DATE 11/13/1971

FROM	TO	DRLG TIME Min per 5 ft	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
0	10	2 1/2	20 Sand tan vfg loose rnd 80 Sh buff bent
10	20	2 1/2	20 Sand ditto 80 Sh ditto
20	30	2 1/2	10 SAND ditto 90 Sh ditto
30	40	2 1/5	60 SAND ditto 40 Sh ditto
40	50	2 1/2	100 SAND buff loose friable good pdk
50	60	2 1/2	100 SAND ditto fair pdk silty
60	70	2 1/2	100 SAND ditto poor pdk v. clayey
70	80	2 1/2	100 SAND ditto ✓
80	90	2 1/2	100 SAND ditto ✓
90	100	2 1/2	100 SAND tan vfg loose good pdk
100	10	2 1/2	100 sand vfg ✓
10	20	2 1/2	100 SAND ✓ fair
20	30	2 1/2	100 SAND ditto silty ✓
30	40	2 1/2	100 SAND ✓ ✓
40	50	2 1/2	100 SAND ✓ ✓
50	60	2 1/2	100 SAND ✓ ✓
60	70	2 1/2	100 SAND ✓ ✓
70	80	2 1/2	100 SAND ✓ ✓
80	90	2 1/3	100 SAND ✓ ✓
90	200	3 1/4	100 SAND ✓ ✓
200	10	6 1/5	100 SAND ✓ ✓
10	20	5 1/6	100 SAND ✓
20	30	4 1/3	100 SAND ✓
30	40	8 1/7	60 ss tan vfg silty 40 Sh buff tan
40	50	9 1/11	30 ss ditto p-pdk 70 Sh
50	60	5 1/3	10 ss ditto ✓ 90 Sh
60	70	11 1/8	30 ss ditto ✓ 70 Sh
70	80	5 1/8	60 ss ditto ✓ 40 Sh
80	90	11 1/4	100 ss ditto
90	300	24 1/25	100 ss tan buff vfg rnd loose bent v silty p-pdk
300	10	33 1/4	90 ss ditto
10	20	4 1/3	90 ss ditto f-medge
20	30	4 1/3	100 ss ditto ✓ vfnable good pdk
30	40	5 1/6	100 ss ditto ✓ ✓

GEORGE E. LAUTH  
 GEOLOGICAL CONSULTANT  
 DURANGO, COLORADO

RECORD OF SAMPLE DESCRIPTION

PAGE NO. 2

SEC. 30 TWP. 20N RGE. 28E LOCATION 1650 FNL, 1650 FWL  
 FARM Indian Allotted NO. 1 ELEVATION 5827 Gr. 5832 KB  
 OWNER Western Helium Corp. STATE Arizona COUNTY Apache  
 SAMPLES FROM 340 TO 680 EXAMINED BY R.E. LAUTH DATE May 14, 1971

FROM	TO	DR LG. TIME Min per 5 ft.	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
340	50	25/23	100 ss red vfg-crs gr rnd slightly
50	60	20/20	100 ss ditto fine porosity
TR ← 60	70	19/6	80 ss ✓ 20 sh. red-brn-red
70	80	3/6	20 ss crs gr loose rnd 80 sh ditto
80	90	7/7	30 ss ditto 70 sh ✓
90	400	7/10	10 ss ✓ 90 sh ✓
400	10	10/10	20 ss ✓ 80 sh ✓
10	20	9/11	20 ss ✓ 80 sh ✓
20	30	5/5	10 ss ✓ 90 sh ✓
30	40	4/4	TR ss ✓ 100 sh red-brn.
40	50	5/4	100 sh red & grey blebs
50	60	7/7	TR ss as above 100 sh ditto
60	70	9/10	TR ss rnd grs 100 sh ✓
70	80	7/11	10 ss ✓ <del>80</del> 90 sh ✓
80	90	6/5	20 ss loose vfg rnd 80 sh ✓
90	500	6/10	20 ss ✓ 80 sh ✓
500	10	10/5	70 ss ✓ 30 sh ✓
10	20	25/4	70 ss ✓ 30 sh ✓
20	30	8/7	30 ss ✓ 70 sh ✓
30	40	9/6	10 ss ✓ 90 sh ✓
40	50	13/7	30 silt red 70 sh
50	60	10/12	20 ss lou. vfg hd 80 sh & silt
60	70	3/8	10 ss vfg-crs gr. 90 sh
70	80	8/9	100 sh red
80	90	9/11	TR. 100 sh varicol red & green
90	600	6/13	TR. ls nod 100 sh ✓
600	10	12/14	60 ss red vfg loose 100 sh ✓
10	20	11/15	70 ss ✓ 100 sh ✓
20	30	13/10	10 ss ditto 100 sh ✓
30	40	11/12	20 ss ✓ 100 sh ✓
40	50	102/10	40 ss ✓ 100 sh ✓
50	60	10/10	TR. ls. 100 sh bright red bent
60	70	13/9	100 sh ✓ ✓
70	80	17/17	100 sh ✓ ✓

ROBERT E. LAUTH  
GEOLOGICAL CONSULTANT  
DURANGO, COLORADO

RECORD OF SAMPLE DESCRIPTION

PAGE NO. 3

SEC. 30 TWP. 20N RGE. 28E LOCATION 1650 FNL, 1650 FWL  
 FARM Indian Allotted NO. 1 ELEVATION 5827 Gr. 5832 KB.  
 OWNER Western Helium Corp. STATE ARIZONA COUNTY Apache  
 SAMPLES FROM 680 TO 1020 EXAMINED BY R. E. LAUTH DATE May 22, 1971

FROM	TO	DR LG TIME Min per 2 ft.	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
680	90	18/12	10 ss. gray vfg tite nil pth 90 Sh. varicol-pastel color
90	700	10/10	100 Sh ditto bent in part
700	10	12/13	10 ss loose vfg red SR-SA 90 Sh. -
10	20	11/17	1.5 rod 100 Sh red bent
20	30	24/13	100 Sh bent
30	40	11/15	TR ss loose vfg occas mg 100 Sh red sh bent
40	50	36/14	100 Sh gray bent
50	60	18/25	30 ss gray vfg r-SR 70 Sh brick red
60	70	24/23	20 ss ditto 80 Sh - & gray gn
70	80	10/15	50 ss gray vfg sfp 50 Sh -
80	90	14/7	60 ss ditto 40 Sh - & paup
90	800	9/10	20 ss - 80 Sh -
800	10	12/10	10 ss loose fg SR-SA 90 Sh brk red
10	20	20/30	10 ss ditto occas. rnd crs gr. 90 Sh ditto
20	30	18/19	TR 100 Sh - v. bent
30	40	20/14	10 ss fg loose 90 Sh red-gm
40	50	36/19	20 ss gray vfg sfp 80 Sh red gm gry
50	60	23/20	20 ss ditto much loose rnd crs pebb 80 Sh ditto
60	70	30/60	100 Sh red & gray lau.
70	80	19/85	TR ss rnd crs gr loose 100 Sh ditto
80	90	77/15	100 Sh varicol
90	900	16/1	TR rnd crs ss gr. 100 Sh -
900	10	5/1	TR ss 100 Sh
10	20	4/5	100 Sh brk red, some selenite
20	30	11/6	TR ss 100 Sh -
30	40	7/5	100 Sh
40	50	5/7	TR ss fg ang 100 Sh
50	60	7/25	TR ss 100 Sh
60	70	14/54	10 ss vfg red loose hd 90 Sh
70	80	50/50	30 ss vfg loose rnd 70 Sh ditto some gm-red
80	90	55/65	TR ss 100 Sh varicol
90	1000	10/6	10 ss loose vfg 90 Sh -
1000	10	20/6	TR ss rnd 100 Sh -
10	20	5/5	100 Sh -

DUMAS, COLORADO  
GEOLOGICAL CONSULTANT  
ROBERT E. LAUTH



Form 9-1123  
(Rev. Dec. 1967)

(Submit in triplicate to appropriate  
Regional Oil and Gas or Mining Supervisor)

## DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Bureau of Indian Affairs, Window Rock, Arizona

SERIAL NO.: See Below

and hereby designates

NAME: Western Helium Corporation  
ADDRESS: P. O. Box 1358, Scottsdale, Arizona 85252

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Indian Allotted Lands - Contract Nos. NOO-C-14-20-2348, 2349, 2351, Section 4-19N-28E; NOO-C-14-20-2352, 2601, 2602, Section 30-20N-28E; NOO-C-14-2603, 2604, 2605 and 2606; Section 32-20N-28E; all in Apache County, Arizona.

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

EASTERN PETROLEUM COMPANY

*Kenneth J. Fullop*  
\_\_\_\_\_  
(Signature of lessee)

April 28, 1971  
(Date)

Box 291, Carmi, Illinois 62821  
(Address)

U. S. GOVERNMENT PRINTING OFFICE 16-52108-3

cc: Western Helium Corp.

Arizona O & G Cons. Comm. ✓

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APR 30 1971

O & G CONS. COMM.

April 23, 1971

Memo from W. E. Allen

Memo to: Western Helium #1 Indian  
SE/4 NW/4 Section 30-T20N-R28E  
Apache County  
Our File #552

Lew Halter called this date to advise that this well was  
spudded on 4-16-71. 7" casing has been set but Halter  
did not know the setting depth.

**APPLICATION FOR PERMIT TO DRILL OR RE-ENTER**

APPLICATION TO DRILL

RE-ENTER OLD WELL

Western Helium Corporation

**NAME OF COMPANY OR OPERATOR**

P.O. Box 1358

Scottsdale

Arizona

85252

Address

City

State

Eastern Petroleum Company

**Drilling Contractor**

P.O. Box 291

Carmi, Illinois

Address

**DESCRIPTION OF WELL AND LEASE**

Federal, State or Indian Lease Number, or if fee lease, name of lessor  
Indian #N00-c-14-20-2352 & Santa Fe

Well number Western Helium Corporation #1 Indian

Elevation (ground)

5800

Nearest distance from proposed location to property or lease line:  
2601 }  
2602 }

Distance from proposed location to nearest drilling, completed or applied—for well on the same lease:

1650

feet

None

feet

Number of acres in lease:

618

Number of wells on lease, including this well, completed in or drilling to this reservoir:

None

If lease, purchased with one or more wells drilled, from whom purchased:

Name

Address

Well location (give footage from section lines)

1650 FNL & 1650 FWL

Section—township—range or block and survey

30-T20N-R28E

Dedication (Comply with Rule 105)

Sec 30-T20N-R28E

Field and reservoir (if wildcat, so state)

Salt Springs

County

Apache

Distance, in miles, and direction from nearest town or post office

10 Miles Southeast of Navajo, Arizona

Proposed depth:

1290 Feet

Rotary or cable tools

Rotary

Approx. date work will start

4/14/71

Bond Status

Blanket

Organization Report

Filing Fee of \$25.00

Amount

25,000

On file Yes Or attached

Attached

Remarks:

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Secretary of the Western Helium Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

RECEIVED

APR 20 1971

O & G CONS. COMM.

*L. W. A. Halter*  
Signature

April 14, 1971

Date

Permit Number: 552

Approval Date: 4-29-71

Approved By: *Walter*

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

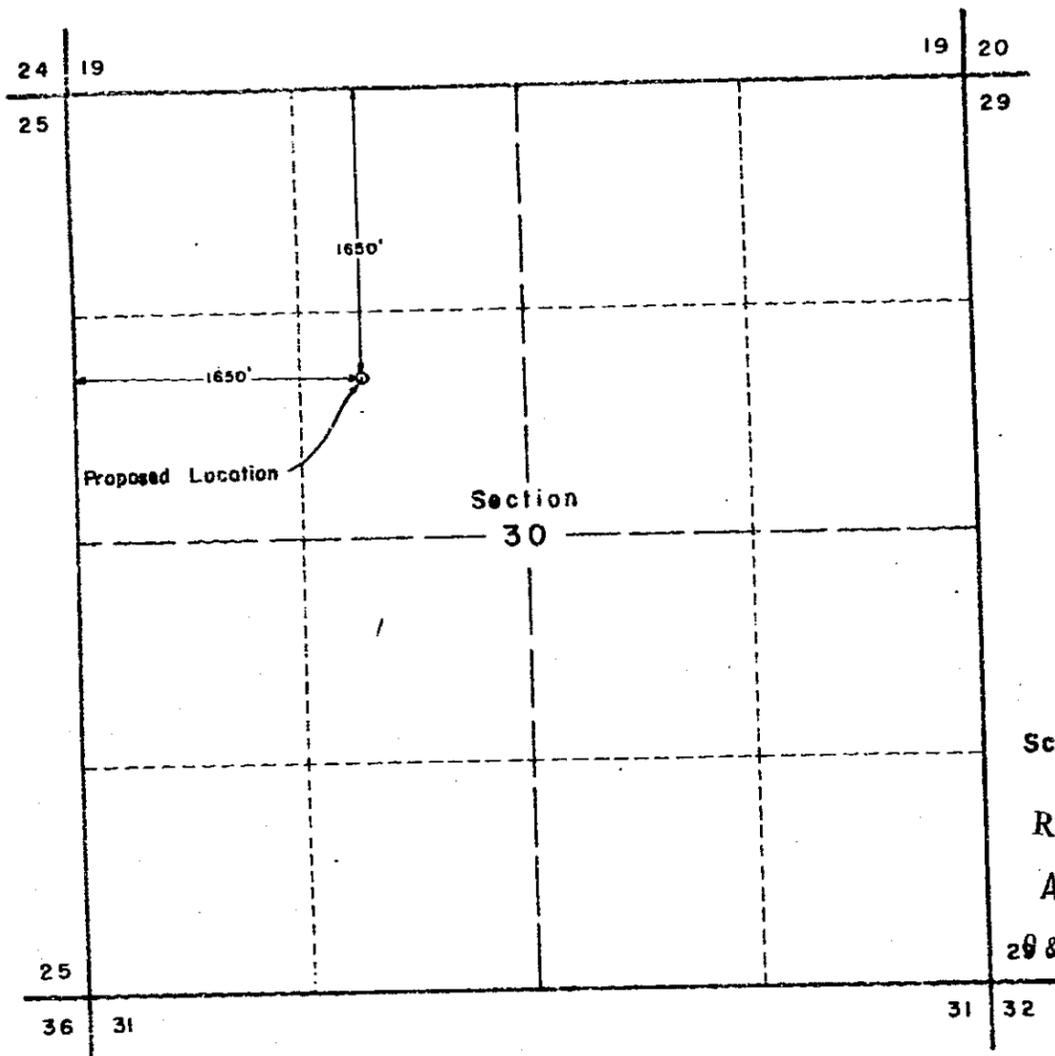
Application to Drill or Re-enter

File Two Copies

Form No. 3

(Complete Reverse Side)





Scale: 1" = 1000'

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APR 21 1971  
29 & G CONS. COMM.

**WELL LOCATION: WESTERN-HELIUM CORP. NO. 1 INDIAN**

Located 1650 feet South of the North line and 1650 feet East of the West line of Section 30,  
Township 20 North, Range 28 East, Gila and Salt River Meridian  
Apache County, Arizona  
Existing ground elevation determined at 5027 feet based on U.S.G.S. datum

I hereby certify the above plat represents a survey made under my supervision and that it is accurate to the best of my knowledge and belief.

*Frederick H. Reed*

FREDERICK H. REED  
Registered Land Surveyor  
STATE OF ARIZONA NO. 5313



WESTERN-HELIUM CORP. Scottsdale, Arizona	
WELL LOCATION PLAT SEC. 30, T20N, R28E APACHE CO., ARIZONA	
CLARK-REED & ASSOC. Durango, Colorado	DATE: April 9, 1971 FILE NO: 71038



# PERMIT TO DRILL

This constitutes the permission and authority from the

OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: WESTERN HELIUM CORPORATION  
(OPERATOR)

to drill a well to be known as

WESTERN HELIUM CORPORATION #1 INDIAN  
(WELL NAME)

located 1650' FNL - 1650' FWL

Section 30 Township 20N Range 28E, APACHE County, Arizona.

The ALL OF SECTION 30 of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 20th day of APRIL, 1971.

OIL AND GAS CONSERVATION COMMISSION

By John K. Bannister  
EXECUTIVE SECRETARY

PRIOR TO BEING ALLOWED TO PRODUCE THIS WELL  
YOU MUST BE IN FULL COMPLIANCE WITH RULE  
100, SECTION A THRU G (SPACING), WITH RESPECT  
TO THE PRODUCT TO BE PRODUCED.

PERMIT **Nº 552**

RECEIPT NO. 2886  
API NO. 02-001-20139

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

Block "A"

STATE OF ARIZONA, County of Apache: ss

FEE NO. 60556

The within instrument was filed and recorded November 4, 1970, at 11:30 A. M. in Docket No. 135 Page 197-199 at the request of Western Helium Corp.

VIRGIE HEAP, Recorder By *Eckel W. Maguire* Deputy  
ASSIGNMENT OF OIL AND GAS LEASE

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, EASTERN PETROLEUM COMPANY, a Delaware Corporation, (hereinafter called Assignor), for and in consideration of Ten Dollars (\$10.00) the receipt whereof is hereby acknowledged, does hereby sell, assign, transfer and set over unto

WESTERN HELIUM CORPORATION, an Arizona Corporation

(hereinafter called Assignee) a three-fourths (3/4) working interest in and to the oil and gas lease dated November 15, 1969 from Santa Fe Pacific Railroad Company, a corporation, to Eastern Petroleum Company, a Delaware Corporation, together with the exclusive right and privilege to explore by geophysical and other methods and to prospect for, drill for, extract, remove and dispose of all the oil, gas, including helium and nitrogen, casinghead gasoline and associated hydrocarbons in or under certain tracts of land in the County of Apache, State of Arizona, more particularly described as Exhibit "A", attached hereto and by this reference made a part hereof, for a period of three years from date of lease, hereinafter referred to as the primary term and as long thereafter as oil, gas, including helium and nitrogen, or associated hydrocarbons or any of them is produced in commercial quantities. In addition thereto, Assignor retains a one-quarter (1/4) carried working interest in the first well to be drilled on any government approved section containing 640 acres, more or less.

Assignee is subject to all terms and conditions, including drilling commitments and timely payment of rentals, and royalty provisions of the lease.

And for the same consideration Assignor covenants with the Assignee, its heirs, successors or assigns; that the Assignor is the lawful owner of and has good title to the interest above assigned in and to said lease, estate, rights and property, free and clear from all liens, encumbrances or adverse claims. That said lease is a valid

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APR 20 1971  
O & G CONS. COMM.

and subsisting lease on the land above described, and all rentals and royalties due thereunder have been paid and all conditions necessary to keep the same in full force have been duly performed, and Assignor hereby surrenders and releases all rights of dower and homestead in the premises above described.

EXECUTED this 24th day of February, 1970.

EASTERN PETROLEUM COMPANY

By Henry Fullop  
President

ATTEST:

J. H. Leonard  
Secretary

STATE OF ILLINOIS )  
                          )  
COUNTY OF WHITE )

The foregoing instrument was acknowledged before me this 24th day of February, 1970, by Henry Fullop, President of EASTERN PETROLEUM COMPANY, on behalf of said corporation.

Shirley H. Haney  
Notary Public

My Commission Expires:  
April, 1972

155 198

APACHE COUNTY, ARIZONA

<u>DESCRIPTION</u>	<u>SECTION</u>	<u>ACRES</u>	<u>TOTAL ACRES</u>
<u>Township 20 North, Range 27 East</u>			
All	24		640.00
<u>Township 20 North, Range 28 East</u>			
E/2	18	320.00	
Lot 1 NW/4	18	36.44	
Lot 2 NW/4	18	36.29	
E/2 W/2	18	160.00	
Lot 3 SW/4	18	36.14	
Lot 4 SW/4	18	<u>35.99</u>	
		624.86	624.86
E/2	19	320.00	
Lot 1 NW/4	19	35.80	
Lot 2 NW/4	19	35.59	
E/2 W/2	19	160.00	
Lot 3 SW/4	19	35.38	
Lot 4 SW/4	19	<u>35.17</u>	
		621.94	621.94
All	20		640.00
All	29		640.00
NE/4	30		<u>160.00</u>
TOTAL ACRES - - - - -			3,326.80

UNIT 155 PAGE 199

EXHIBIT "A"

21

5-184e  
(August 1961)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

LEASE No. ....

CONTRACT No. NDD-C-14-20-  
2352

**ASSIGNMENT OF MINING LEASE**

WHEREAS, the Secretary of the Interior or his authorized representative has heretofore approved  
..... mining lease, dated September 5....., 1959,  
entered into by and between Ush-ka-ha-de-ya-e or heirs, Allottee No. O 10002 (1120), lessor,  
and Arizona Helium Corporation....., lessee,  
covering the following-described lands in the Navajo Allotted Indian Lands  
(Insert name of Reservation, Pueblo, Nation, etc., as needed)  
in the State of Arizona  
Lots 1 and 2, E½ NW¼ of Section 30, Township 20N,  
Range 28E, Apache County, containing 143.97 acres.

Now, THEREFORE, for and in consideration of .....,  
TEN dollars (\$ 10.00.....), the receipt of which is hereby acknowl-  
edged, the said EASTERN PETROLEUM COMPANY, A Delaware Corporation,  
the owner of the above-described lease, hereby bargains, sells, transfers, assigns, and conveys .....,  
THREE-FOURTHS (3/4)..... right, title, and interest in and to said lease.

subject to the approval of the Secretary of the Interior or his authorized representative to .....,  
WESTERN HELIUM CORPORATION....., of Scottsdale,  
Arizona..... Said assignment to be effective from date of approval hereby by the Secretary  
of the Interior or his authorized representative.

IN WITNESS WHEREOF, the said assignor has hereunto set its hand and seal, this 31st  
day of July....., 1970.

EASTERN PETROLEUM COMPANY

RECEIVED

APR 20 1971

O & G CONS. COMM.

(OVER)

Henry Fullop  
PRESIDENT

15

N00-C-14-20-2352

**A KNOWLEDGMENT OF CORPORATI**

STATE OF ARIZONA } ss:  
COUNTY OF MARICOPA }

Before me, a notary public, in and for said county and State on this 31st day of July, 1970 personally appeared HENRY FULLOP to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its PRESIDENT and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

*Jaqueline S. Henaker*  
Notary Public.

My commission expires \_\_\_\_\_, 19\_\_\_\_

**ACKNOWLEDGMENT OF INDIVIDUAL**

STATE OF \_\_\_\_\_ } ss:  
COUNTY OF \_\_\_\_\_ }

Before me, a notary public, in and for said county and State, on this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_ personally appeared \_\_\_\_\_, to me known to be the identical person who executed the within and foregoing instrument, and acknowledged to me that \_\_\_\_\_ executed the same as \_\_\_\_\_ free and voluntary act and deed for the uses and purposes therein set forth.

Notary Public.

My commission expires \_\_\_\_\_, 19\_\_\_\_

**ACCEPTANCE BY ASSIGNEE**

The assignee in the above and foregoing assignment, made subject to the approval of the Secretary of the Interior, hereby accepts such assignment and agrees to fulfill all the obligations, conditions, and stipulations in said described instrument of lease, when assigned, and the rules and regulations of the Secretary of the Interior applicable thereto, and to furnish proper bond guaranteeing a faithful compliance with said lease and this agreement.

IN WITNESS WHEREOF, the said assignee has hereunto set ITS hand and seal this 31st day of JULY, 1970.

WESTERN HELIUM CORPORATION  
*W. B. Thoreen*  
PRESIDENT

**CONSENT OF SURETY**

The \_\_\_\_\_, of \_\_\_\_\_, surety for \_\_\_\_\_ on the bond accompanying the lease above described, hereby consents to the assignment and transfer of said lease as above made and agrees that said bond shall remain in force and effect covering obligations of assignee.

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_

DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS  
AUG 17 1970  
*Val McCrossin*  
Area Director.

APPROVED:

5-1846  
(August 1961)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

LEASE NO. \_\_\_\_\_  
CONTRACT NO. NOO-C-14-20-  
2601

**ASSIGNMENT OF MINING LEASE**

WHEREAS, the Secretary of the Interior or his authorized representative has heretofore approved  
\_\_\_\_\_ mining lease, dated August 28, 1969,  
entered into by and between Hostan-bah, Allottee No. 010003 (1150) lessor,  
and ARIZONA HELIUM CORPORATION lessee,  
covering the following-described lands in the Navajo Allotted Indian Lands  
(Insert name of Reservation, Pueblo, Nation, etc., as needed)  
in the State of Arizona  
Lots 2, 4 and E $\frac{1}{2}$ SW $\frac{1}{4}$  of Section 30, T.20N., R.28E.,  
Apache County, containing 149.61 acres.

Now, THEREFORE, for and in consideration of \_\_\_\_\_  
TEN dollars (\$10.00), the receipt of which is hereby acknowl-  
edged, the said EASTERN PETROLEUM COMPANY, A Delaware Corporation,  
the owner of the above-described lease, hereby bargains, sells, transfers, assigns, and conveys  
Three-fourths (3/4) right, title, and interest in and to said lease,  
subject to the approval of the Secretary of the Interior or his authorized representative to \_\_\_\_\_  
WESTERN HELIUM CORPORATION, of Scottsdale,  
Arizona. Said assignment to be effective from date of approval hereby by the Secretary  
of the Interior or his authorized representative.

IN WITNESS WHEREOF, the said assignor has hereunto set its hand and seal, this 31st  
day of July, 1970.

EASTERN PETROLEUM COMPANY

Henry J. Culp  
PRESIDENT

MO-C-14-20-2601

ACKNOWLEDGMENT OF CORPORATE

STATE OF ARIZONA
COUNTY OF MARICOPA

Before me, a notary public, in and for said county and State on this 31st day of July, 1970
personally appeared HENRY FULLOP
to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its
PRESIDENT and acknowledged to me that
he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

Notary Public signature

My commission expires 19

ACKNOWLEDGMENT OF INDIVIDUAL

STATE OF
COUNTY OF

Before me, a notary public, in and for said county and State, on this day of 19
personally appeared
to me known to be the identical person who executed the
within and foregoing instrument, and acknowledged to me that executed the same as free
and voluntary act and deed for the uses and purposes therein set forth.

Notary Public

My commission expires 19

ACCEPTANCE BY ASSIGNEE

The assignee in the above and foregoing assignment, made subject to the approval of the Secretary of the Interior, hereby accepts such assignment and agrees to fulfill all the obligations, conditions, and stipulations in said described instrument of lease, when assigned, and the rules and regulations of the Secretary of the Interior applicable thereto, and to furnish proper bond guaranteeing a faithful compliance with said lease and this agreement.

IN WITNESS WHEREOF, the said assignee has hereunto set ITS hand and seal this 31st day of JULY, 1970

WESTERN HELIUM CORPORATION
Signature
PRESIDENT

CONSENT OF SURETY

The of
surety for
on the bond accompanying the lease above described, hereby
consents to the assignment and transfer of said lease as above made and agrees that said bond shall remain in force and
effect covering obligations of assignee.

Dated at this day of 19

DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
AUG 17 1970
Area Director

APPROVED:

151

5-184a  
(August 1961)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

LEASE No. \_\_\_\_\_  
CONTRACT NO. NONQQ-C-14-29-  
2602

**ASSIGNMENT OF MINING LEASE**

WHEREAS, the Secretary of the Interior or his authorized representative has heretofore approved  
\_\_\_\_\_ mining lease, dated August 27, 1969,  
entered into by and between T'lin-shon-in or JAMES GOLDTOOTH, lessor,  
and Arizona Helium Corporation, Allottee No. 010004 (693), lessee,  
covering the following-described lands in the Navajo Allotted Indian Lands  
(Insert name of Reservation, Pueblo, Nation, etc., as needed)  
in the State of Arizona

SE 1/4 of Section 30, T.20N., R.28E.,  
Apache County, containing 160 acres.

Now, THEREFORE, for and in consideration of \_\_\_\_\_  
TEN dollars (\$10.00), the receipt of which is hereby acknowl-  
edged, the said EASTERN PETROLEUM COMPANY, A Delaware Corporation,  
the owner of the above-described lease, hereby bargains, sells, transfers, assigns, and conveys \_\_\_\_\_  
Three-fourths (3/4) right, title, and interest in and to said lease.

subject to the approval of the Secretary of the Interior or his authorized representative to \_\_\_\_\_  
WESTERN HELIUM CORPORATION, of Scottsdale,  
Arizona. Said assignment to be effective from date of approval hereby by the Secretary  
of the Interior or his authorized representative.

IN WITNESS WHEREOF, the said assignor has hereunto set its hand and seal, this 31st  
day of July, 1970.

EASTERN PETROLEUM COMPANY

Henry Fullen  
PRESIDENT

A KNOWLEDGMENT OF CORPORATI

500-C-14-20-2602

STATE OF ARIZONA } ss:  
COUNTY OF MARICOPA }

Before me, a notary public, in and for said county and State on this 31st day of July, 1970, personally appeared HENRY FULLOP, PRESIDENT, to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

*Jacqueline S. Heneker*  
Notary Public.

My commission expires \_\_\_\_\_, 19\_\_\_\_\_

ACKNOWLEDGMENT OF INDIVIDUAL

STATE OF \_\_\_\_\_ } ss:  
COUNTY OF \_\_\_\_\_ }

Before me, a notary public, in and for said county and State, on this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_, personally appeared \_\_\_\_\_, to me known to be the identical person who executed the within and foregoing instrument, and acknowledged to me that \_\_\_\_\_ executed the same as \_\_\_\_\_ free and voluntary act and deed for the uses and purposes therein set forth.

Notary Public.

My commission expires \_\_\_\_\_, 19\_\_\_\_\_

ACCEPTANCE BY ASSIGNEE

The assignee in the above and foregoing assignment, made subject to the approval of the Secretary of the Interior, hereby accepts such assignment and agrees to fulfill all the obligations, conditions, and stipulations in said described indenture of lease, when assigned, and the rules and regulations of the Secretary of the Interior applicable thereto, and to furnish proper bond guaranteeing a faithful compliance with said lease and this agreement.

IN WITNESS WHEREOF, the said assignee has hereunto set ITS hand and seal this 31st day of JULY, 1970.

WESTERN HELIUM CORPORATION  
*W. B. Shores*  
PRESIDENT

CONSENT OF SURETY

The \_\_\_\_\_, surety for \_\_\_\_\_ on the bond accompanying the lease above described, hereby consents to the assignment and transfer of said lease as above made and agrees that said bond shall remain in force and effect covering obligations of assignee.

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_

DEPARTMENT OF THE INTERIOR  
BUREAU OF INDIAN AFFAIRS

*W. M. Brown*  
Area Director

APPROVED:



OFFICE OF  
**Oil and Gas Conservation Commission**  
STATE OF ARIZONA  
4515 NORTH 7TH AVE.  
PHOENIX, ARIZONA 85013  
PHONE: (602) 271-5161

June 3, 1977

Mr. John Cunningham  
Box 51  
Farmington, New Mexico 87401

Re: Plugging Helium Wells in the Navajo Springs Area

Dear John:

Enclosed are copies of Application to Plug and Abandon (Form 9). Please fill out these forms on each well to be plugged and return to this office for approval prior to initiating plugging operations.

Also enclosed is a copy of our rules and regulations. Please refer to Rule 202, Page 20, of this publication.

Please notify me prior to commencing plugging operations in time for me to arrange to be on location.

If we can be of any assistance to you, please advise.

Very truly yours,

William E. Allen  
Director  
Enforcement Section

WEA/vh  
Enc.

April 20, 1977

Western Helium Corporation  
P.O. Box 950  
Virginia, Minnesota 55792

Re: Western Helium Connelly - Kerr-McGee State #1  
NE/4 NE/4 Sec. 36, T20N, R27E,  
Apache County, Arizona  
State Permit 553

Gentlemen:

You are probably aware that Kerr-McGee Corporation discontinued the operation of its helium extraction plant at Navajo, Arizona on February 25, 1976. Kerr-McGee has recently plugged and abandoned all its helium wells in this area. Your firm discontinued operations of its helium extraction plant several years ago. Therefore, it seems improbable that any further helium production will be accomplished in this area in the foreseeable future.

This letter is a formal request from the Oil and Gas Conservation Commission for you to properly plug the above-referred well as quickly as possible. In addition to there being no market for helium gas in this area, your well has never been in compliance with the Commission's Rule 105-B and also the Commission's Order No. 41. Therefore, even if there were a market, this well would not be allowed to produce.

Unless we have a positive response to this request within sixty days of the date of this letter, this Commission will request your bonding company to fulfill its

Western Helium Corporation  
April 20, 1977  
Page 2

obligations and plug this hole in accordance with our  
rules and regulations.

Very truly yours,

William E. Allen  
Director  
Enforcement Section

WEA/vb

Enc.

Certified Mail -  
Return Receipt

cc - Mr. John Cunningham

February 11, 1974

Ms. Susan M. Perry  
The Travelers  
Cherry Creek Center  
101 University Boulevard  
Denver, Colorado 80206

Re: Western Helium Corporation  
Bond No. 1674375 - \$25,000

Dear Ms. Perry:

Please be advised that the above referenced bond may not be cancelled until the operators are in full compliance with the rules and regulations of the Oil and Gas Conservation Commission of the State of Arizona.

There are presently two shut-in wells covered by this bond. Until such time as these wells have been plugged, the location cleaned, and all required reports submitted, this bond will remain in full force and effect.

Very truly yours,

  
W. E. Allen, Director  
Enforcement Section

WEA/rlb

cc - Western Helium  
Pennsylvania



**THE TRAVELERS**

Surety Department  
E. A. Houser, III, Manager

February 5, 1974

State of Arizona  
Oil & Gas Conservation Commission  
Phoenix, Arizona 85001

RE: Western Helium Corporation  
Bond No. 1674375

Gentlemen:

Our company executed a \$25,000.00, Performance Bond-Statewide Oil & Gas  
(Amount) (Type)  
effective 3/1/71 for the above captioned.

In accordance with the terms of the bond, this letter will serve as our Notice of Cancellation and termination from all further liability effective 3/1/74. We would appreciate your sending us a letter verifying the date on which cancellation becomes effective. A self-addressed, postage free envelope is enclosed for your convenience in replying.

Thank you.

*Susan M. Perry*  
Very truly yours,

SURETY DIVISION  
sp

552

sp

August 18, 1971

Mrs. Jo Ratcliff  
Four Corners Sample Cut Association  
P. O. Box 899  
Farmington, New Mexico 87401

Re: Western Helium Corporation #1, Indian  
SE/4 NW/4 Sec. 30 T20 N R28E  
Apache County *file # 552*

Dear Mrs. Ratcliff:

Please advise this office if you have received the samples from the  
above referenced well.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/r1b

ROBERT E. LAUTH  
GEOLOGIST  
POST OFFICE BOX 776  
960 EAST SECOND AVENUE  
DURANGO, COLORADO 81301  
Telephone (303) 247-0025

August 17, 1971

Mr. W.E. Allen  
Oil & Gas Conservation Commission  
State of Arizona  
4515 North 7th Ave.  
Phoenix, Arizona 85013

Dear Mr. Allen:

I am in receipt of your letter of August 12, 1971 to Western Helium Corporation regarding the samples from the No. 1 Indian well, Sec 30 T20N R28E.

Please refer to my letter to Four Corners Sample Assoc. of June 14, 1971, a copy of which was sent to your office.

I have checked with Mr. John Cunningham and Mr. Robert Fullop. Both of these gentlemen confirm the fact that the samples were delivered to Four Corners Sample Cut on or about June 17, 1971.

Please re-check your records.

Very truly yours,

*Robert E. Lauth*

Robert E. Lauth  
Certified Professional Geologist  
AIPG No. 1366; AAPG No. 707

cc. Western Helium  
Robert Fullop

RECEIVED

AUG 18 1971

O & G CONS. COMM.

552

August 12, 1971

Mr. Lew A. Halter  
Western Helium Corporation  
P. O. Box 1358  
Scottsdale, Arizona 85252

RE: Western Helium Corporation #1 Indiana  
SE/4 NW/4 Section 30 T20N R28E  
Apache County  
Our file #552

Dear Mr. Halter:

Our records indicate that we have not received the samples from the above referenced well.

Will you please arrange to have these samples delivered to the Commission office of the Four Corners Sample Cut at your earliest convenience. Directives D-170 is enclosed for your information.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA/rlb  
Enclosure

Phone 602/947-8388



## western helium corporation

p.o. box 1358 / scottsdale, arizona 85252

*WH*  
PRODUCERS  
OF HELIUM

July 26, 1971

State of Arizona  
Oil & Gas Conservation Commission  
4515 North 7th Avenue  
Phoenix, Arizona 85013

Re: Permit No. 552

Gentlemen:

Enclosed herewith please find two (2) copies of the logs on the  
above captioned well.

Thank you.

Yours truly,

A handwritten signature in cursive script, appearing to read 'Lew A. Halter', is written over the typed name.

WESTERN HELIUM CORPORATION

By: Lew A. Halter  
Secretary/Treasurer

LAH:te

Encs.

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JUL 27 1971

O & G CONS. COMM.

552

Phone 602/947-8388



**western helium corporation**

p.o. box 1358 / scottsdale, arizona 85252

PRODUCERS  
OF HELIUM

June 24, 1971

State of Arizona  
Oil & Gas Conservation Commission  
4515 North 7th Avenue  
Phoenix, Arizona 85013

Gentlemen:

We have ordered additional copies of the logs run on the enclosed wells. As soon as they are received we will forward them to you.

Thank you.

Yours truly,

WESTERN HELIUM CORPORATION  
By: Lew A. Halter  
Secretary/Treasurer

LAH:te

Encs.

RECEIVED

JUN 25 1971

O & G CONS. COMM.

552

June 22, 1971

Mr. Lew A. Halter  
Western Helium Corporation  
P. O. Box 1358  
Scottsdale, Arizona 85252

Re: Western Helium Connelly #1 KM State  
NE/4 NE/4 Sec. 36-T20N-R27E  
Apache County  
Our File #553

Western Helium #1 Indian  
SE/4 NW/4 Sec. 30-T20N-R28E  
Apache County  
Our File #552

Dear Mr. Halter:

This is just a reminder to let you know that we need to receive Form 4, Well Completion Report, on your Western Helium Connelly #1 KM State as soon as possible. Also submit Form 9, Application to Abandon and Plug, Form 10, Plugging Record, Form 4, Well Completion Report, and any logs that may have been run on your Western Helium #1 Indian.

We would appreciate receiving this information as quickly as possible.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA:jd  
Enc.

WR

ROBERT E. LAUTH  
GEOLOGIST  
POST OFFICE BOX 776  
950 EAST SECOND AVENUE  
DURANGO, COLORADO 81301  
Telephone (303) 247-0025

June 14, 1971

Mrs. Jo Ratcliff  
Four Corners Sample Assoc.  
641 West Broadway P.O. Box 899  
Farmington, New Mexico 87401

Re: Samples: Surface to 1310 feet  
Western Helium Corp. No. 1  
Indian Allotted. SENE  
Sec. 30 T20N R26E  
Apache County, Arizona

Dear Jo:

The samples on the above captioned well will be left off at sample cut by Mr. John Cunningham.

Please make the necessary sample cuts as required by the Arizona Oil & Gas Conservation Commission. Send the invoice to Western Helium Corporation, P.O. Box 1358, Scottsdale, Arizona 85252.

Also enclosed find one dollar (\$1.00). Please send me a catalog of samples which can be rented at Four Corners.

Thank you.

*R. E. Lauth*  
R. E. Lauth

cc: Arizona O & G Comm.  
Western Helium Corp.  
Eastern Petroleum Co.

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JUN 18 1971

O & G CONS. COMM.

552

552

Phone 602/947-8388

WA



**western helium corporation**

suite 3, box 1358 /scottsdale square /44 east indian school road /scottsdale, arizona 85252

PRODUCERS  
OF HELIUM

April 20, 1971

State of Arizona  
Oil & Gas Conservation Commission  
4515 North 7th Avenue  
Phoenix, Az 85013

Attention: Mr. W. Allen

Dear Mr. Allen:

Enclosed herewith is the well location plat for Western Helium Corporation #1 Indian well.

Yours truly,

A handwritten signature in cursive script, appearing to read 'Signe L. Evangelisti'.

WESTERN HELIUM CORPORATION  
By: Signe L. Evangelisti  
Secretary

Enc.

RECEIVED

APR 21 1971

O & G CONS. COMM.

April 20, 1971

Mr. Lew A. Halter  
Western Helium Corporation  
P. O. Box 1358  
Scottsdale, Arizona 85252

Re: Western Helium Corporation #1 Indian  
SE/4 NW/4 Section 30-T20N-R28E  
Apache County  
Our File #552

Dear Mr. Halter:

Enclosed please find Receipt No. 2886 covering the \$25 filing fee, Permit To Drill 552, and copies of your approved Application for Permit to Drill and the approved bond.

Also enclosed are miscellaneous instruction sheets concerning samples and other Commission requirements.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

jd  
Enc.

April 16, 1971

Mr. Lew A. Halter  
Western Helium Corporation  
P. O. Box 1358  
Scottsdale, Arizona 85252

Re: Application for Permit to Drill

Dear Mr. Halter:

Pursuant to our telephone conversation this morning, we are returning the attached Application for revision. Please do not forget to include a copy of the lease assignment when you return this Application.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA:jd  
Enc.

**APPLICATION FOR PERMIT TO DRILL OR RE-ENTER**

APPLICATION TO DRILL  RE-ENTER OLD WELL

Western Helium Corporation 5800

**NAME OF COMPANY OR OPERATOR**

P.O. Box 1358 Scottsdale Arizona 85252

Address

Eastern Petroleum Company

Drilling Contractor

P.O. Box 291 Carmi, Illinois

Address

**DESCRIPTION OF WELL AND LEASE**

Federal, State or Indian Lease Number, or if no lease, name of lessor Indian #N00-C-14-20-2352	Well number Western Helium Corporation #1 Indian	Use (ground) 5800
Nearest distance from proposed location to property or lease line: 1650 feet	Distance from proposed location to nearest drilling, completed or applied-for well on the same lease: None feet	
Number of acres in lease: 149	Number of wells on lease, including this well, completed in or drilling to this reservoir: None	
If lease purchased with one or more wells drilled, from whom purchased: Name	Address	

Well location (give bearings from section lines) 1650 FNL & 1650 FWL	Section—township—range or block and survey 30-T20N-R28E	Deed location (Comply with Rule 105)
---	--	--------------------------------------

Field and reservoir (if wildcat, so state) Salt Springs	County Apache
--	------------------

Distance, in miles, and direction from nearest town or post office:  
10 Miles Southeast of Navajo, Arizona

Proposed depth: 1290 Feet	Rotary or cable tool: Rotary	Approx. date work will start: 4/14/71
Bond Status: Blanket	Organization Report: On file Yes Or attached	Filing Fee of \$25.00: Attached

Remarks:

RECEIVED  
APR 15 1971  
O & G CONS. COMM.

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Secretary of the

Western Helium Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

*Paul A. Holter*  
Signature

April 14, 1971  
Date

Permit Number: 552  
Approval Date: \_\_\_\_\_  
Approved By: \_\_\_\_\_  
Notes: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
Application to Drill or Re-enter  
File Two Copies  
Form No. 2





OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA

4515 NORTH 7TH AVE.

PHOENIX, ARIZONA 85013

PHONE: (602) 271-5161

April 2, 1971

Mr. Raymond L. Kysar, Jr.  
Kysar Insurance Agency, Incorporated  
The Travelers Indemnity Company  
2604 East Main  
Farmington, New Mexico 87401

Re: Eastern #21 Ancon Santa Fe SE/4 NW/4 Sec. 31-T20N-R28E Apache County Our File #234  
Eastern #21-1A Santa Fe Fee NW/4 NW/4 Sec. 31-T20N-R28E Apache County Our File #537

Dear Ray:

As of this date we have not received the serial number of the performance bond that has been issued to Western Helium Corporation. It is imperative that we receive the serial number as quickly as possible.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

WEA:jd

1674375

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552

APR 08 1971

O & G CONS. COMM.

Phone 602/947-8388



**western helium corporation**

suite 3, box 1358 / scottsdale square / 44 east indian school road / scottsdale, arizona 85252

PRODUCERS  
OF HELIUM

March 15, 1971

State of Arizona  
Oil & Gas Conservation Commission  
4515 North 7th Avenue  
Phoenix, Arizona 85013

Attention: Mr. W. E. Allen, Director

Re: The Travelers Indemnity Company Bond

Dear Mr. Allen:

Enclosed herewith please find the executed Travelers  
Indemnity Company Bond.

Thank you.

Yours truly,

A handwritten signature in cursive script that reads "Signe L. Evangelisti".

WESTERN HELIUM CORPORATION

By: Signe L. Evangelisti  
Secretary

Enclosure

RECEIVED

MAR 16 1971

O & G CONS. COMM.



OFFICE OF

**Oil and Gas Conservation Commission**

STATE OF ARIZONA

██████████ 4515 NORTH 7th AVE.  
PHOENIX, AZ. 85013  
Phoenix, Arizona 85007

PHONE: 271-5161

March 12, 1971

Mr. O. R. Thoureen  
Western Helium Corporation  
P. O. Box 1358  
Scottsdale, Arizona 85052

Re: The Travelers Indemnity Company Bond  
State Wide - \$25,000

Dear Mr. Thoureen:

Enclosed please find the above referenced bond submitted to this office on March 11. Before this bond can be approved and put into effect by this Commission; however, it must bear your signature which was apparently accidentally omitted. As soon as we receive the bond with your signature, it will be approved and a copy returned to you.

Very truly yours,

W. E. Allen, Director  
Enforcement Section

jd  
Enc.

RECEIVED

MAR 16 1971

O & G CONS. COMM.

PLEASE DETACH BEFORE DEPOSITING CHECK  
FOR PAYMENT OF YOUR INVOICES AS FOLLOWS

DATE	DESCRIPTION	AMOUNT
4/19/71	Application for permit to drill. <i>#522</i>	\$25.00

WESTERN HELIUM CORPORATION