

COMPLETION REPORT

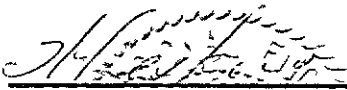
of the

DRILLING and TESTING

of

Hemisphere Helium Lunda Prov.  
16-15-20-6 WPM

Compiled by:

  
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H. Leskiw, P. Geol.

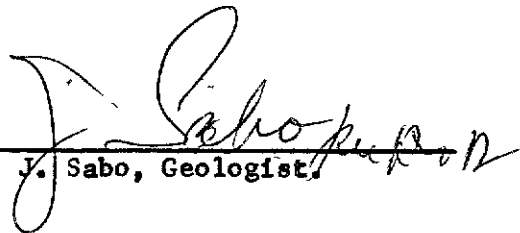
  
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J. Sabo, Geologist

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Pertinent Data

Name of Company· Hemisphere Helium Corporation Ltd. s

Name of Well Hemisphere Helium Lunda Prov. 16-15-20-6

Legal Description: Lsd. 16, Section 15, Township 20, Range 6, W1M

Co-Ordinates

Status of Well· Abandoned

Drilling Contractor· Sedco Exploration

Elevation: Ground - 827.8  
K.B. - 832.8

Total Depth· Driller - 1124  
Schlumberger - 1123

Spud Date: 9 00 A.M., June 3, 1962

Completion Date June 13, 1962

Rig Released June 17, 1962

Logs taken Schlumberger Induction Electrical  
Schlumberger Sonic

STRATIGRAPHY

K B. 032.8 GRD. 827 8

	<u>Sample</u>	<u>E-Log</u>	<u>Subsea</u>	
<u>Devonian</u>				
Ashern	51 ft.		+ 782	<i>KB 840</i>
<u>Silurian</u>				
Interlake	95 ft.		+ 738	
<u>Ordovician</u>				
Stony Mountain	488 ft.	489	+ 344	+ 392
Red River	566 ft	556	+ 277	+ 328
Winnipeg Shale		974	- 141	- 107
Winnipeg Sand		1043	- 210	- 160
<u>Pre-Cambrian</u>				
		1116	- 283	- 229

DAILY PROGRESS REPORT

June 3, 1962 - Spud with 6½" bit 9:00 A.M. Depth 120 ft.  
 Bit #1 6½ surface to 80 ft  
 Bit #2 6½ V3 80 to 120  
 Additives 3 sax Gel, 3 sax Bran, 2 sax  
 Sawdust - Lost Circulation  
 Survey 107 ft. ½ deg.

June 4, 1962 - Depth 160 ft. Bits 3- 9", No 4 7 7/8,  
 No. 5 9"  
 Additives 100 Bran  
 Running Casing

June 5, 1962 - Running Casing W O C

June 6, 1962 - Depth 210 Drilling

June 7, 1962 - Depth 455. Drilling with Water.  
 Survey at 330' 1½ deg. @ 425 1½ deg.

June 8, 1962 - Depth 570. Twisted off at 550 ft.  
 Waiting on Fishing tool. Rec. fish 5:00 P.M.  
Lost Circulation at 568 ft. Regained but  
 still losing mud to 605. Mixed 14 sax Gel.

June 9, 1962 - Depth 715 ft. lost 400 ft. fish. Twisted  
 off. Rec. same in half hour.  
 Additives 28 sax Gel, 8 sawdust, 2 Bran

June 10, 1962 - Depth 805. Drilling

June 11, 1962 - Depth 945. Drilling

June 12, 1962 - Depth 1122. Drilling Break encountered  
 at 1020-1110. Drilling 85 ft. in 115  
 minutes. Samples very poor  
Lost Complete Circulation at 1090 ft..  
 Survey @ 1100 1½ deg.  
 Additives 100 sax Sawdust, 19 sax Gel

June 13, 1962 - Depth 1124. Schlumberger Logging.  
 Attempt run Micro-log failed, abundant  
 lost circulation material on bottom.  
 Unable for micro pad to come in contact  
 with wall bottom hole Measured 4" in  
 diameter. Abandoned micro-log to run Sonic.

Ind. E-Log	143 - 1123	2"
	146 - 1123	5"
Sonic	143 - 1123	2"
	900 - 1123	5"

- June 14, 1962 - D S.T #1. 1101.6 - 1123.00. 21.84 ft. tail  
V.O. 1 hour, S.I. 30 minutes.  
Good I.P. fair air blow but died rapidly  
appears plugging. Rec. 20 ft. mw.
- June 15, 1962 - Complete mud change over. Rerun D S.T. #1  
D.S T. #2 - 1099.3 - 1123.00. V.O. for  
30 minutes.  
No results. Reset packer, valve opened with  
no results except for a few bubbles. Assumed  
tool plugged. Pulled packer. Chart  
indicated perfect test. ^ However no blow  
on surface was recorded. This was confirmed  
by a zero flow reading on pressure charts.  
Sonic log indicates good porosity over  
tested interval, which should yield some air blow or  
pressure reading on chart Formation  
plugged off.
- June 16, 1962 - Running plugs Run plug No. 1 on bottom  
W O C
- June 17, 1962 - Felt plug at 920'. Running plug No. 2  
Felt 2 plug at 160'. Will drop another 23  
sax cement
- June 18, 1962 - Dropped another 23 sax on top of plug No 2.  
Also couple sax cement on top then welded  
plate 3' below ground
- Plug #1 - 1123-900 54 sax 3% CaCl<sub>2</sub>  
felt at 920' after waiting 12 hours.
- Plug #2 - 188-88, 29 sax 3% CaCl<sub>2</sub>  
felt at 160' after 12 hours. Dropped  
another 23 sax plus 3% CaCl<sub>2</sub> on top of  
plug #2.
- 2 sax cement at surface Welded plate  
3' below ground

SAMPLE DESCRIPTION

10' - 20'	Some drift quartz, Feldspars, medium crystalline dark mineral, Dolomite, dense, white, weathered, pinked, hard.
20' - 30'	Some drift as above. Dolomite, dense, white weathered, pink, hard.
30' - 40'	Dolomite as above, caving drift.
40' - 50'	Dolomite as above. Limestone, pinkish trace, shale red.
50' - 60'	Dolomite, brick red, some red shale powdery 51' Ashern
60' - 70'	Shale, calcareous, brick red, earthy.
70' - 80'	Very argillaceous, red Dolomite as above.
80' - 90'	Powdery, brick red Dolomite as above.
90' - 100'	Dolomite, brick red as above. 95' Interlake
100' - 110'	Dolomite, white, dense, very hard
110' - 120'	Dolomite, white, vitreous, dense, finely crystalline, very hard.
120' - 130'	Dolomite, white, vitreous, finely crystalline, very hard, occasionally blood red.
130' - 140'	Dolomite, white, finely crystalline, very hard, occasionally blood red, traces of very poor pin point porosity - no show.
140' - 150'	Dolomite, white, finely crystalline, sucrose in part, fossiliferous. Trace of poor pin point porosity - no show.
150' - 160'	Dolomite, white, dense, vitreous, hard.
160' - 170'	Dolomite, white, dense as above.
170' - 180'	Dolomite as above.
180' - 190'	Dolomite as above.
190' - 200'	Dolomite as above.
200' - 240'	Dolomite as above.
240' - 250'	Dolomite as above, appearance of red and green calcareous shale
250' - 260'	Dolomite, white as above.
260' - 270'	Dolomite, white as above.
270' - 280'	Dolomite, white as above, traces blood red.
280' - 300'	Dolomite as above.
300' - 310'	Dolomite, Calcitic, white greenish, earthy. Some brick red shale.
310' - 320'	Dolomite, white, dense, slightly earthy.
320' - 330'	Dolomite as above with oolitic dolomitic limestone.
330' - 340'	Dolomitic limestone as above, traces oolitic limestone
340' - 370'	Dolomite, white, calcareous, earthy.
370' - 380'	Dolomite, white, finely crystalline, sucrose in part, fossiliferous in part, trace porosity
380' - 390'	Dolomite, calcitic, red, argillaceous, earthy
390' - 400'	Dolomite, white.
400' - 410'	Dolomite as above occasionally leached porosity.
410' - 420'	Dolomite, white, finely crystalline, sucrose in part, some poor porosity.

420' - 430'	Dolomite, white as above, some fossils, good leached porosity.
430' - 440'	Dolomite, white, dense.
440' - 450'	Dolomite, light tan, crypto, crystalline.
450' - 460'	Dolomite, pinkish red, argillaceous, dense.
460' - 470'	Dolomite as above
470' - 480'	Dolomite, white, calcitic, dense, sucrose in part, trace very poor porosity
480' - 490'	Dolomite as above.
490' - 500'	Shale, brick red, some green, calcareous Dolomite.
500' - 510'	Shale, brick red and green, Dolomite granular.
510' - 520'	Shale, brick red and green as above.
520' - 530'	Shale as above.
530' - 540'	Shale as above.
540' - 550'	Shale as above.
550' - 560'	Shale as above.
560' - 569'	Dolomite, white, light tan, earthy, sucrose in part, trace of fair porosity. Lost Circulation, poor sample.
569' - 580'	Dolomite, tan, trace white, finely crystalline, sucrose in part, fossiliferous in part, good porosity.
580' - 588'	Dolomite, tan, finely crystalline, sucrose, trace porosity. Losing circulation.
588' - 590'	Dolomite, tan, crystalline and sucrose, secondary calcite, small vugs, good porosity, no show.
590' - 598'	Dolomite, tan as above. Evidence of very small vugs.
598' - 600'	Dolomite, brown, earthy, lithographic with scattered small fossil leached porosity, good pin point porosity. Losing circulation.
600' - 610'	Dolomite, brown, lithographic, earthy, dense.
610' - 620'	Dolomite, brown to grey, lithographic, earthy dull, trace sucrose, abundant small calcite crystals.
620' - 630'	Dolomite, light brown, dense. No porosity.
630' - 640'	Dolomite, tan and grey, dense, argillaceous, earthy, dull. Trace secondary calcite crystals.
640' - 650'	Dolomite, tan and grey, dark grey, occasional limestone, white, powdery, light tan, slightly vitreous finely crystalline.
650' - 660'	Dolomite, tan, grey, argillaceous, trace limestone white, powdery.
660' - 670'	Dolomite as above.
670' - 680'	Dolomite as above.
680' - 690'	Dolomite as above.
690' - 700'	Dolomite, light tan, vitreous, finely crystalline to sucrose, some porosity.
700' - 710'	Dolomite as above.
720' - 740'	Sample missing.
740' - 750'	Limestone, white, earthy, slightly vitreous, fine crystalline, sucrose, trace, porous, fossiliferous, powdering in part.
750' - 760'	Limestone, white, light tan, earthy, fragmental, trace sucrose, powdery in part.
760' - 830'	Limestone as above.
830' - 840'	Limestone, grey, argillaceous, finely crystalline, dense, trace sucrose, porous.



840' - 850'	Limestone, earthy, sucrose, good porosity.
850' - 860'	Limestone, white-light grey, some fine porosity.
860' - 870'	Limestone, white, light grey, argillaceous, fossiliferous, powdery to dense, some porous sucrose lime.
870' - 880'	Limestone as above. No porosity.
880' - 890'	Limestone, white-light grey, earthy, dense, soft slightly argillaceous Trace fossiliferous.
890' - 930'	Limestone as above.
930' - 940'	Limestone, light grey, earthy, dense, soft slightly argillaceous.
940' - 970'	Limestone as above.
970' - 980'	Limestone, grey, greenish, argillaceous, appears slightly silty in part.
980' - 1000'	Shale, green, waxy, soft. Quartz, white, flecks black mineral some orange feldspar. Sandstone, fine grained, well sorted, unconsolidated, pyrite.
1000' - 1105'	Poor samples, losing circulation.
1100' - 1105'	Sand, white, unconsolidated, well rounded, fine and medium grained, well sorted, excellent porosity. Some pyrite & kaolinite.
1105' - 1115'	Shale, green-grey, detrital type. Sandstone, quartz, poorly sorted, medium grained. Rounded and subrounded weathered feldspar.
1115' - 1124'	Basement quartz and feldspar.

DRILL STEM TEST SUMMARY.

D S T #1

1101 6 - 1123.00, 21 84 ft tail.  
V O 1 hour S I. 30 minutes.  
Good I P for fair air blow but died  
rapidly Appears plugging Rec. 20 ft mud.  
IHP 720, FHP 505, FP opened and dropped to  
30 pds plugged after a few seconds  
FSP 310. Misrun

D S T #2

1099 3 - 1123.00 V O for 30 minutes  
no results. Reset packet, valve opened with  
no results except for a few bubbles Assumed  
tool plugged Pulled packer. Chart indicated  
perfect test

DRILLING TIME RECORD

9.

Depth		<u>Minutes to Drill</u>	<u>Remarks</u>
<u>From</u>	<u>To</u>		
170	175	45	15 min. to repair swivel
175	180	20	
180	185	24	
185	190	25	
190	195	25	
195	200	23	
200	205	24	
205	210	25	
210	215	23	
215	220	20	
220	225	21	
225	230	24	
230	235	25	
235	240	25	
240	245	30	
245	250	30	
250	255	50	
255	260	35	
260	265	35	
265	270	33	
270	275	38	
275	280	28	
280	285	20	
285	290	35	
290	295	29	
295	300	31	
300	305	43	
305	310	29	
310	315	27	
315	320	13	
320	325	10	
325	330	30	
330	335	23	
335	340	15	
340	345	25	
345	350	24	
350	355	25	
355	360	21	
360	365	11	
365	370	13	
370	375	8	
375	380	14	
380	385	21	
385	390	22	
390	395	20	
395	400	25	
400	405	17	
405	410	10	
410	415	05	
415	420	05	
420	425	12	
425	430	30	

<u>From</u>	<u>Depth To</u>	<u>Minutes to Drill</u>	<u>Remarks</u>
430	435	17	
435	440	32	
440	445	38	
445	450	38	
450	455	25	
455	460	40	
460	465	32	
465	470	25	
470	475	23	
475	480	26	
480	485	35	
485	490	47	
490	495	27	
495	500	28	
500	505	27	
505	510	26	
510	515	20	
515	520	17	
520	525	35	
525	530	29	
530	535	21	
535	540	21	
540	545	33	
545	550	25	
550	555	25	
555	560	25	
560	565	24	
565	570		Lost Circulation
570	575		@ 569
575	580	25	
580	585	30	
585	590	20	
590	595	15	
595	600	27	
600	605	22	
605	610	30	
610	615	30	
615	620	35	
620	625	41	
625	630	52	
630	635	29	
635	640	33	
640	645	80	
645	650	62	
650	655	50	
655	660	63	
660	665	38	
665	670	32	
670	675	34	
675	680	24	
680	685	30	

Depth		<u>Minutes to Drill</u>	<u>Remarks</u>
<u>From</u>	<u>To</u>		
685	690	25	
690	695	34	
695	700	35	
700	705	40	
705	710	20	
710	715	45	
715	720	30	
720	725	35	
725	730	35	
730	735	33	
735	740	27	
740	745	21	
745	750	31	
750	755	32	
755	760	33	
760	765	32	
765	770	39	
770	775	29	
775	780	24	
780	785	43	
785	790	42	
790	795	38	
795	800	28	
800	805	30	
805	810	57	
810	815	55	
815	820	52	
820	825	45	
825	830	38	
830	835	37	
835	840	40	
840	845	30	
845	850	25	
850	855	35	
855	860	48	
860	865	45	
865	870	45	
870	875	55	
875	880	32	
880	885	32	
885	890	30	
890	895	25	
895	900	30	
900	905	34	
905	910	38	
910	915	39	
915	920	33	
920	925	43	
925	930	37	
930	935	35	
935	940	38	
940	945	40	

Depth		Minutes to Drill	Remarks
From	To		
945	950	43	
950	955	37	
955	960	40	
960	965	45	
965	970	50	
970	975	42	
975	980	25	
980	985	13	
985	990	32	
990	995	36	
995	1000	25	
1000	1005	35	
1005	1010	26	
1010	1015	21	
1015	1020	15	
1020	1025	05	
1025	1030	06	
1030	1035	07	
1035	1040	09	
1040	1045	11	
1045	1050	07	
1050	1055	05	
1055	1060	04	
1060	1065	05	
1065	1070	05	
1070	1075	05	
1075	1080	05	
1080	1085	03	
1085	1090	03	
1090	1095	03	
1095	1100	07	
1100	1105	10	
1105	1110	12	
1110	1115	13	
1115	1120	48	
1120	1121	12	1 ft. time drilling
1121	1122	13	
1122	1123	25	

Abandonment Programme

Plug #1- 1123-900, 54 sax 3% CaCl<sub>2</sub>. Felt at 920' after 12 hours.

Plug #2- 188-88, 29 sax 3% CaCl<sub>2</sub>; Felt at 160' after 12 hours.

Dropped another 23 sax plus 3% CaCl<sub>2</sub> on top of  
plug #2

2 sax cement at surface. Welded plate 3'  
below ground.