

OFFICE USE ONLY  
 Log No. 85225  
 Permit No. 121-4  
 Basin WW-3  
 NOTICE OF INVENT 4742

PRINT OR TYPE ONLY  
 DO NOT WRITE ON BACK

WELL DRILLER'S REPORT

Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

1. OWNER HOMESTAKE MINING CO. ADDRESS AT WELL LOCATION LUNING, NV.  
 MAILING ADDRESS P.O. BOX 89  
GRANTS, NEW MEXICO 87020  
 2. LOCATION NE 1/4 NE 1/4 Sec. 3 T. 8 N/S R. 34 E. MINERAL County  
 PERMIT NO. 48103 Issued by Water Resources Parcel No. Subdivision Name

3. WORK PERFORMED  
 New Well  Replace  Recondition  
 Deepen  Abandon  Other  
 4. PROPOSED USE  
 Domestic  Irrigation  Test  
 Municipal/Industrial  Monitor  Stock  
 5. WELL TYPE  
 Cable  Rotary  RVC  
 Air  Other

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thick-ness
WELL WW-3				
CASED & SEALED TO 57' FEET WITH 20" CASING BY SARGENT IRRIGATION. PULLED PUMP OUT FROM 1220' FT				
PERFORATED 12" CASING FROM 780' FT TO 1010' FT.				
SIX ROWS OF PERFORATIONS 1/4 x 1" ONE INCH APART.				
PUMPED 5 YARDS OF NEAT CEMENT FROM 1300' BACK TO 1190' FT AND LET SET FOR 6 HRS.				
THEN MIXED & PUMPED 16 YDS OF 14% BENTONITE GROUTE FROM 1190' FT UP TO 780' FT.				
SET PLUG AT 25' FT AND PUMPED NEAT CEMENT TO SEAL TOP 25' FT.				

8. WELL CONSTRUCTION  
 Depth Drilled 1301 Feet Depth Cased 1301 Feet  
 HOLE DIAMETER (BIT SIZE)  
 From To  
 Inches Feet Feet  
 Inches Feet Feet  
 Inches Feet Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
12 3/4		.250	+1	1301

Perforations:  
 Type perforation HOLT PERFORATOR  
 Size perforation 1/4 x 1 ONE INCH APART  
 From 780' feet to 1010' feet  
 Surface Seal:  Yes  No Seal Type:  
 Depth of Seal           Neat Cement  
 Placement Method:  Pumped  Cement Grout  
 Poured  Concrete Grout  
 Bentonite  
 Gravel Packed:  Yes  No Groute  
 From          feet to          feet

9. WATER LEVEL  
 Static water level 865' feet below land surface  
 Artesian flow          G.P.M.          P.S.I.  
 Water temperature          °F Quality         

10. DRILLER'S CERTIFICATION  
 This well was drilled under my supervision and the report is true to the best of my knowledge.  
 Name LEACH DRILLING, INC. Contractor  
 Address P.O. BOX 599 Contractor  
SILVER SPRINGS, NEVADA 89429  
 Nevada contractor's license number issued by the State Contractor's Board 0031841  
 Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1876 & 1740  
 Signed Matthew P. Leach  
 By driller performing actual drilling on site or contractor  
 Date Nov 28/01

Date started NOVEMBER 12, 2001 19  
 Date completed NOVEMBER 15, 2001 19

7. WELL TEST DATA

TEST METHOD:	G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
<input type="checkbox"/> Bailer <input type="checkbox"/> Pump <input type="checkbox"/> Air Lift			

# WELL CONSTRUCTION SUMMARY

LOCATION or COORDS: N1/4 N1/4  
SECTION 3, T. 8 N, R. 34 E

ELEVATION: GROUND LEVEL APPROX 5220'  
 TOP OF CASING \_\_\_\_\_

## DRILLING SUMMARY:

TOTAL DEPTH 1,301 FEET  
 BOREHOLE DIAMETER 17 1/2 - INCH  
 DRILLER SARGENT IRRIGATION CO.  
 RIG FALLING 3000  
 BIT(S) BUTTON  
 DRILLING FLUID BENTONITE/POLYMER  
 SURFACE CASING 20-INCH, 0-57 FEET

## CONSTRUCTION TIME LOG:

TASK	START		FINISH	
	DATE	TIME	DATE	TIME
DRILLING:				
<u>24-INCH</u>	<u>4/27</u>	<u>1700</u>	<u>4/27</u>	<u>1830</u>
<u>17 1/2 - INCH</u>	<u>4/27</u>	<u>0700</u>	<u>5/10</u>	<u>0945</u>
GEOPHYS. LOGGING:	<u>5/10</u>	<u>1140</u>	<u>5/10</u>	<u>1445</u>
CASING:				
<u>20-INCH</u>	<u>4/28</u>	<u>0700</u>	<u>4/28</u>	<u>1130</u>
<u>12 3/4 - INCH</u>	<u>5/10</u>	<u>1600</u>	<u>5/10</u>	<u>2230</u>
FILTER PLACEMENT:	<u>5/11</u>	<u>0015</u>	<u>5/11</u>	<u>0800</u>
CEMENTING:	<u>4/28</u>	<u>1200</u>	<u>4/28</u>	<u>1330</u>
DEVELOPMENT:	<u>5/11</u>	<u>1000</u>	<u>5/11</u>	<u>2140</u>
OTHER:				
<u>AIR-LIFT DEV</u>	<u>5/16</u>	<u>1000</u>	<u>5/16</u>	<u>1730</u>
<u>PUMP DEV</u>	<u>5/25</u>	<u>1100</u>	<u>6/14</u>	<u>1630</u>

## WELL DESIGN:

BASIS: GEOLOGIC LOG X GEOPHYSICAL LOG X  
 CASING STRING(S): C=CASING S=SCREEN

0 - 58	C1	1239 - 1279	C3
+1 - 999	C2	1279 - 1299	S1
999 - 1059	C3	1299 - 1301	C4
1059 - 1079	S1		
1079 - 1119	C3		
1119 - 1199	S1		
1199 - 1219	C3		
1219 - 1239	S1		

CASING: C1 20" X 0.25" BLANK  
 C2 12 3/4" X 0.25" BLANK  
 C3 12 3/4" X 0.25" DOUBLE PERF  
 C4 12 3/4" X 0.25" 2 FT CONSTANT PUG  
 SCREEN: S1 12 3/4" 80 SLOT  
 S2 \_\_\_\_\_  
 S3 \_\_\_\_\_  
 S4 \_\_\_\_\_

CENTRALIZERS \_\_\_\_\_

FILTER MATERIAL 1/4" X 3/8" ROUNDED  
WARDSWORTH TYPE

CEMENT 0 TO 57 FEET CEMENT SEAL

OTHER \_\_\_\_\_

## WELL DEVELOPMENT

REVERSE SIDE WATER DOWN HOLE,  
MUD UP THROUGH DRILL PIPE 1 1/2 FEET  
OFF BOTTOM (5/11 1000HRS - 1530HRS)  
SWAB + INJECT SAND (5/11 1740HRS - 2140HRS)

## COMMENTS:

STATIC WATER LEVEL 865 FEET  
72-HOUR CONSTANT DISCHARGE  
PUMPING TEST 6/15 -> 6/18  
T = 440 gpd/FT-H  
C<sub>1</sub> = .48

LOCATION SPACED FOR PHOTO LOGGING ONLY

PROJECT COLUMBIAN COUNTY, ILL. 397419171

