WHITE—DIVISION OF WATER RESOURCES
CANARY—CLIENT'S COPY
PINK—WELL DRILLER'S COPY

PRINT OR TYPE ONLY
DO NOT WRITE ON BACK

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLER'S REPORT

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

OFFICE USE ONLY
Log No. 87921
Permit No.
Basin 137-A

NOTICE OF INTENT NO. 47412

1. OWNER Mattahan Mining Co. - DBA Royal Standard Mining
MAILING ADDRESS 1311 N. McCannan Blvd #105 Sparks Nev. 89431
ADDRESS AT WELL LOCATION Mattahan Nv.

2. LOCATION SE ¼ SW ¼ Sec. 18 T. 8 N/S R. 44 E. Nye County
PERMIT NO. Waiver # 00-007-34 (Issued by Water Resources) Parcel No. Subdivision Name

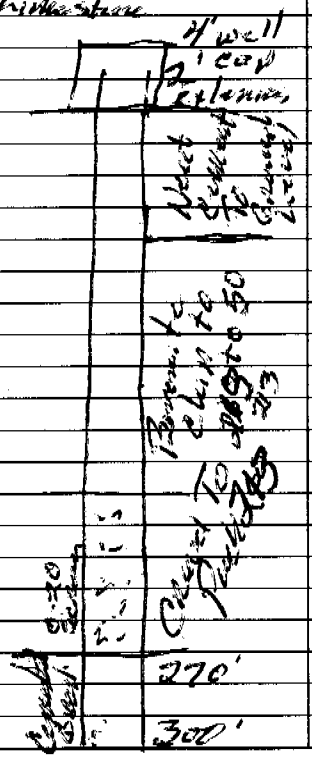
3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ Other

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	Thickness
Overburden		0	10	10
Bedrock Fractured		10	105	95
Limestone		105	145	40
Calcareous		145	205	60
Quartz + Limestone		205	270	65
Limestone		270	300	30



Date started, 19
Date completed, 19

7. WELL TEST DATA

TEST METHOD: ☐ Bailer ☐ Pump ☒ Air Lift

	G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
Air Lift	10	250	1 Hr.

8. WELL CONSTRUCTION +2
Depth Drilled 270 Feet Depth Cased 272 Feet

HOLE DIAMETER (BIT SIZE)

	From	To
14" Inches	0 Feet	20 Feet
8 Inches	20 Feet	300 Feet
Inches	Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
4"		Sch 80	0	220'
		Perf. 220 sch 80	220'	270

Perforations:
Type perforation 0.020
Size perforation 0.020
From 0 feet to 220 Blank feet
From 220 feet to 270 perf. feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 50'
Placement Method: ☒ Pumped ☐ Poured
Seal Type: ☒ Neat Cement ☐ Cement Grout ☐ Concrete Grout

Gravel Packed: ☒ Yes ☐ No
From ~~270~~ 213 feet to 270 feet

9. WATER LEVEL
Static water level 165 feet below land surface
Artesian flow NO G.P.M. P.S.I.
Water temperature Cold °F Quality Good

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Stratiles Exploration Inc (Contractor)
Address Box 547 (Contractor)
Battle Mtn Nev 89820
Nevada contractor's license number issued by the State Contractor's Board 0029456
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1755
Signed Floyd Peters (By driller performing actual drilling on site or contractor)
Date 8-4-02

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

GEOLOGIC LOG

DEC
DYER ENGINEERING CONSULTANTS, INC.

BORING/MONITOR WELL NO: MWW-01 COMPLETION DATE: 06-07-02
LOCATION: SW Corner of Orphant Patent Claim
PROJECT NAME: Gold Wedge PROJECT NO.: LOGGED BY: Robert Marvin
BORING TYPE: 6 inch R-C Hammer followed by 8 inch tricone BORING DIAMETER: 8 inch final

DEPTH FEET	WELL CONST.	GRAPHIC LOG	SOIL CLASS	SAMPLES TYPE	SAMPLES REC. %	SAMPLES I.D./INT.	H_2O ~~BERY COUNT~~ Zones	ANALYSES	DESCRIPTION
0								GEOCHEM SAMPLES COLLECTED ON 5 FOOT INTERVALS	Alluvial gravels; sub angular to sub rounded clasts. Well defined Channel deposits with fine grained, silty interbeds. Moderately consolidated. Mod. $CaCO_3$
5									
10			BED ROCK						Tan-green silty phyllite. Locally crenulated, Mod to strong feox on fracture. Local spotty MnO_2 and $CaCO_3$ on frac. Non-calcareous
15									A/P with sparse qtz vnlts.
20									A/P
25									A/P
30									A/P
35									A/P - strong feOx on foliation and on cross fracture.
40									
45									
50									
55									
60									

WELL COMPLETION MATERIALS:

SURFACE COMPLETION:
CASING:
SCREEN:

☐ GRAVEL PACK:
☐ ANNULAR SEAL (1):
☐ ANNULAR SEAL (2):

DEC
DYER ENGINEERING CONSULTANTS, INC.

BORING/MONITOR WELL NO: MWW-01 **COMPLETION DATE:**
LOCATION: SW Cor. Orphant Patent Claim
PROJECT NAME: Gold wedge **PROJECT NO.:** **LOGGED BY:** Robert Merrin
BORING TYPE: R-C Hammer (4inch); 8inch tricone **BORING DIAMETER:** 8 inch final

DEPTH FEET	WELL CONST.	GRAPHIC LOG	SOIL CLASS	SAMPLES TYPE	SAMPLES REC. %	SAMPLES I.D./INT.	BLOW COUNT	ANALYSES	DESCRIPTION
60									Phyllite, feOx and spotty MnO2 on foliation and on cross fracture sparce qtz vnlts.
65									A/p
70									A/p ; no qtz vnlts.
75									moderate bleaching of phyllite, weak feOx ; mod MnO2. Light tan to yellow
80									Dark green phyllite with local, intense feOx zones
85									A/p
90									A/p
95									A/p
		VOID??							Lost circ @ ~97-100, possible void
100									A/p
105									Strong feOx and MnO2 on foliation
110									Coarse grained limestone. Pervasive MnO2 and feOx. Abundant feOx and MnO2 on fracture.
115									A/p ; becoming highly fractured
120									A/p

WELL COMPLETION MATERIALS:

SURFACE COMPLETION:
CASING:
SCREEN:

☐ GRAVEL PACK
☐ ANNULAR SEAL (1):
☐ ANNULAR SEAL (2):

DEC
DYER ENGINEERING CONSULTANTS, INC.

BORING/MONITOR WELL NO: MWW-01 **COMPLETION DATE:**
LOCATION: SW Corner of Orphant Patent Claim
PROJECT NAME: Gold Wedge **PROJECT NO.:** **LOGGED BY:** Robert Marvin
BORING TYPE: 6 inch R-C Hammer followed by 8 inch tricone **BORING DIAMETER:** 8 inch final

DEPTH FEET	WELL CONST.	GRAPHIC LOG	SOIL CLASS	SAMPLES TYPE	SAMPLES REC. %	SAMPLES I.D./INT.	H_2O ~~BLOW COUNT~~ Zones	ANALYSES	DESCRIPTION
120							Dry		Coarse crystaline limestone with weak, pervasive feOx and local calcite vnlts
125									A/P
130									A/P
135							Dry		A/P with mod to strong perv. feOx
140									A/P
145									Light grey to green phyllite, locally crenulated. Moderately to weakly calcareous.
150							Dry		A/P
155									A/P with ~2% dism. pyrite
160							Dry		
							Minor H_2O during 8 inch reem		A/P
165							Minor H_2O @ rod break		A/P
170							Dry		A/P
175							Dry		Bleached phyllite with quartzite interbeds. moderate, patchy feOx. Locally weakly calcareous
180									

WELL COMPLETION MATERIALS:

SURFACE COMPLETION:
CASING:
SCREEN:

☐ GRAVEL PACK
☐ ANNULAR SEAL (1):
☐ ANNULAR SEAL (2):

DEC
DYER ENGINEERING CONSULTANTS, INC.

BORING/MONITOR WELL NO: _____ COMPLETION DATE: _____
LOCATION: _____
PROJECT NAME: _____ PROJECT NO.: _____ LOGGED BY: _____
BORING TYPE: _____ BORING DIAMETER: _____

DEPTH FEET	WELL CONST.	GRAPHIC LOG	SOIL CLASS	SAMPLES TYPE	SAMPLES REC. %	SAMPLES I.D./INT.	Water ~~Water Content~~ Zones	ANALYSES	DESCRIPTION
180							Dry		Weakly calcareous phyllite with abundant quartzite interbeds and local qtz vnlts. Quartz vnlts have chlorite(?) halos
185									A/P
190									A/P
195									A/P
200									Tan to green quartzite. FeOx + yellow oxide on frac.
205							Dry		Sandy limestone. Strong perv. feox. Calcite vnlts. possibly mod. decalcified. Interval is highly fractured.
210									A/P
215							Dry		Coarse crystaline limestone with mod to strong perv. feox and spotty Mnox
220									A/P
225							Abundant H_2O		A/P
230							Pumped well @ 5 gal/M		A/P
235									A/P
240									

WELL COMPLETION MATERIALS:

SURFACE COMPLETION: _____
CASING: _____
SCREEN: _____

☐ GRAVEL PACK: _____
☐ ANNULAR SEAL (1): _____
☐ ANNULAR SEAL (2): _____

DEC
DYER ENGINEERING CONSULTANTS, INC.

BORING/MONITOR WELL NO: _____ COMPLETION DATE: _____
LOCATION: _____
PROJECT NAME: _____ PROJECT NO.: _____ LOGGED BY: _____
BORING TYPE: _____ BORING DIAMETER: _____

DEPTH FEET	WELL CONST.	GRAPHIC LOG	SOIL CLASS	SAMPLES TYPE	SAMPLES REC. %	SAMPLES LD./INT.	Water ~~BLOW COUNT~~ Zones	ANALYSES	DESCRIPTION
240									Coarse crystaline limestone with mod to strong perv. feox and spotty MnO2
245							Abundant water ~10 gal/min		A/P weak to mod feox
250									A/P
255									white to green coarse crystaline limestone with local zones of dism to patchy pyrite
260									A/P
265							Abundant water ~10 gal/m		A/P
270									A/P
275									A/P
280									weakly calcareous phyllite with dism to patchy pyrite
285							Abundant water		non-calcareous phyllite with dism to patchy pyrite.
290									Dark brown-grey sandstone to very sandy phyllite. minor dism? pyrite
295									A/P EOH
302							Pumped while 10 gal/min		

WELL COMPLETION MATERIALS:

SURFACE COMPLETION: _____
CASING: _____
SCREEN: _____

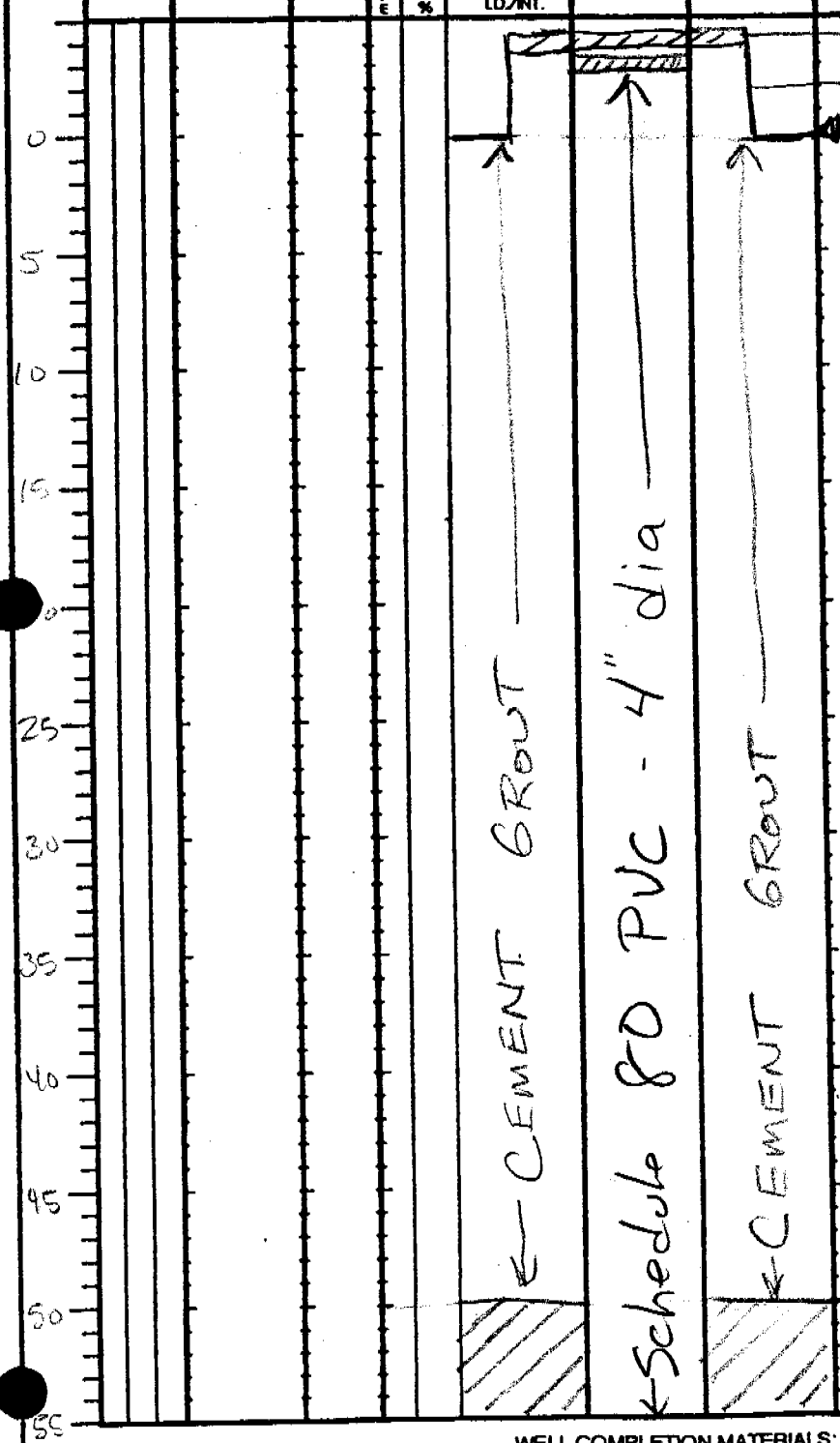
☐ GRAVEL PACK: _____
☐ ANNULAR SEAL (1): _____
☐ ANNULAR SEAL (2): _____

WELL Construction Data

DEC
DYER ENGINEERING CONSULTANTS, INC.

BORING/MONITOR WELL NO: MWW-01 COMPLETION DATE: 06-07-02
LOCATION: SW Cor. of Orphant Patent Claim
PROJECT NAME: Gold Wedge PROJECT NO.: _____ [redacted] BY: Robert Marin
BORING TYPE: _____ BORING DIAMETER: _____

DEPTH FEET	WELL CONST.	GRAPHIC LOG	SOIL CLASS	SAMPLES TYPE	SAMPLES REC. %	SAMPLES I.D./INT.	BLOW COUNT	ANALYSES	DESCRIPTION



WELL COMPLETION MATERIALS:

SURFACE COMPLETION: _____
CASING: _____
SCREEN: _____

☐ GRAVEL PACK: _____
☐ ANNULAR SEAL (1): _____
☐ ANNULAR SEAL (2): _____

DEC
DYER ENGINEERING CONSULTANTS, INC.

WELL CONST. CONT.

BORING/MONITOR WELL NO: MWW-01 COMPLETION DATE:
LOCATION:
PROJECT NAME: Gold Wedge PROJECT NO.: LOGGED BY:
BORING TYPE: BORING DIAMETER:

DEPTH FEET	WELL CONST.	GRAPHIC LOG	SOIL CLASS	SAMPLES TYPE	SAMPLES REC. %	SAMPLES I.D./INT.	BLOW COUNT	ANALYSES	DESCRIPTION
55							PVC - Blank Schedule 80 4" dia.		
60									
65									
70									
75									
80									BENTONITE SEAL
									GROUT
85									
90									
95									
100									
105									
110									
115									

WELL COMPLETION MATERIALS:

SURFACE COMPLETION:
CASING:
SCREEN:

☐ GRAVEL PACK:
☐ ANNULAR SEAL (1):
☐ ANNULAR SEAL (2):

DEC
DYER ENGINEERING CONSULTANTS, INC.

BORING/MONITOR WELL NO: MWW-01 COMPLETION DATE: 06-07-02
LOCATION:
PROJECT NAME: Gold Wedge PROJECT NO.: [redacted]D BY: RDM
BORING TYPE: BORING DIAMETER:

DEPTH FEET	WELL CONST.	GRAPHIC LOG	SOIL CLASS	SAMPLES TYPE	SAMPLES REC. %	SAMPLES I.D./INT.	BLOW COUNT	ANALYSES	DESCRIPTION
115									
120									
125									
130									
135									
140									
145									Bentonite Seal
150									
155									
160									water Level @ time of Sampling
165									Approx Sample collection area
170									
175									

WELL COMPLETION MATERIALS:

SURFACE COMPLETION:
CASING:
SCREEN:

☐ GRAVEL PACK:
☐ ANNULAR SEAL (1):
☐ ANNULAR SEAL (2):

DEC
DYER ENGINEERING CONSULTANTS, INC.

BORING/MONITOR WELL NO: MWW-01 COMPLETION DATE: 06-07-02
LOCATION:
PROJECT NAME: PROJECT NO.: [redacted] BY: RDM
BORING TYPE: BORING DIAMETER:

DEPTH FEET	WELL CONST.	GRAPHIC LOG	SOIL CLASS	SAMPLES TYPE	SAMPLES REC. %	SAMPLES LD./INT.	BLOW COUNT	ANALYSES	DESCRIPTION
175									
180									
185									
190									
195									
200									
205									Bentonite Seal
210									
215									213 Top of sand pack 92 bags total (50 lbs per bag)
220									Top of screen interval
225									
230									
235									

BLANK Schedule 80 PVC 4" Dia

0.020 SCREEN Schedule 80 PVC

WELL COMPLETION MATERIALS:

SURFACE COMPLETION:
CASING:
SCREEN:

☐ GRAVEL PACK:
☐ ANNULAR SEAL (1):
☐ ANNULAR SEAL (2):

WELL CONSTRUCTION LOG #1785

DEC
DYER ENGINEERING CONSULTANTS, INC.

BORING/MONITOR WELL NO: MWW-01 **COMPLETION DATE:** 06-07-18:00
LOCATION: SW Corner Orphant Patent Claim
PROJECT NAME: _____ **PROJECT NO.:** _____ **LOGGED BY:** _____
BORING TYPE: R-C Hammer with 8 inch tricone ream **BORING DIAMETER:** 8 inch

DEPTH FEET	WELL CONST.	GRAPHIC LOG	SOIL CLASS	SAMPLES TYPE	SAMPLES REC. %	SAMPLES I.D./INT.	BLOW COUNT	ANALYSES	DESCRIPTION
235									
240									
245									#8 sand sand pack
250									
255									.020 slot Screen sch 80 PVC (4" dia); Flush Thread
260									
265									Pumped well for 10 min @ ~25 gal/min @ 7:30-7:40 am 06/06/02. Pump depth 269' bgs
270									Threaded End Cap
275									
280									8 inch bore back-filled with drill cuttings
285									
290									
292									
294									
296									
298									
300									

Schedule 80 PVC
0.020 SCREEN

WELL COMPLETION MATERIALS:

SURFACE COMPLETION: _____
CASING: _____
SCREEN: _____

☐ GRAVEL PACK: _____
☐ ANNULAR SEAL (1): _____
☐ ANNULAR SEAL (2): _____