

# AMAX

EXTRACTIVE RESEARCH & DEVELOPMENT, INC.  
5950 McINTYRE STREET, GOLDEN, COLORADO 80401  
303-279-7636

## ANALYTICAL REPORT

JOB NUMBER

76821

DATE SUBMITTED: 9-20-83  
DATE COMPLETED: \_\_\_\_\_  
WORKING PLACE NUMBER: 6920  
DEPT. NO.: 200

SUBMITTED BY: F. PITARD EXT. 373  
COPIES TO: H. D. PILKINGTON

SUBMITTER'S COMMENTS: AMAX EXPLORATION - GEOTHERMAL SAMPLE PREP. YES  NO

DESIRED ACCURACY: Req # 12456 Project 33026 and 33028

ROUTINE  EXPEDITE  AUTHORIZED BY: \_\_\_\_\_

PREFERRED ORDER OF DETERMINATION		SAMPLE MATRIX/COMPOSITION (e.g. pH, MAJOR IONS, ELEMENTS, ETC.)										
SAMPLE IDENTIFICATION	EST.	pH	EST.	CO <sub>3</sub> <sup>-</sup>	EST.	CO <sub>3</sub> H <sup>-</sup>	EST.	EST.	EST.	EST.	EST.	EST.
1 W14774		8.7		15		165						
2 W15007 Big <i>Mustie bottle</i>		7.5		0		153						
3 W15008		8.7		67		161						
4 W15009		8.65		65		163						
5												
6		ppm SiO <sub>2</sub>		ppm Na		ppm K		ppm Ca		ppm Mg		ppm Li
7 W14774 acidified		39.8		1981		17.5		32.9		4.7		4.98
8 W15007 acidified		45.4		443		18.1		217		134		0.031
9 W15008 acidified		168		1078		104		28.5		9.1		0.089
10 W15009 acidified		165		1066		106		27.4		9.4		0.093
11		umho/cm conductivity		ppm Cl %		2/l SO <sub>4</sub>		ppm B		ppm Mo		ppm Cu
12												
13 W14774 big bottle	8100	1.92		4.4		1.72		3.9		0.421		0.003
14 W15007 "	3580	1.05		1.0		.367		5.6		0.029		0.007
15 W15008 "	4480	1.31		9.2		.324		33.6		0.137		0.045
16 W15009 "	4430	1.28		7.0		.319		2.1		0.133		0.058
17												
18												
19												
20												

ANALYST'S SIGNATURE(S)	CODE	DATE	DETER.	METHOD	COMMENTS
<i>J. Mean</i>	17	9-20-83	SiO <sub>2</sub> NaK Ca Mg Li Cu Mo	ICP	All samples contain precipitate. Only liquid was analyzed
<i>J. Mean</i>	19	9-26-83	Conductivity pH, CO <sub>3</sub> , HCO <sub>3</sub>	Zeta meter, pH meter	
<i>DB</i>	2	10-12-83	Cl <sup>-</sup>	SIE	1.5 hrs
<i>DB</i>	2	10-12-83	F <sup>-</sup>	SIE	1.5 hrs
<i>DB</i>	2	10-		Bran	2.5 hrs
<i>DOB</i>	16	10/17/83	B	ICP	

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## ANALYTICAL REPORT

DATE SUBMITTED: 29 Sept 83  
 DATE COMPLETED: \_\_\_\_\_  
 WORKING PLACE NUMBER: 6920  
 DEPT NO.: 200

JOB NUMBER: 16814105  
 EXT: 373

TESTED BY: FFP  
 COPIES TO: \_\_\_\_\_

SUBMITTER'S COMMENTS: EXP - DENVER

SAMPLE PREP. YES  NO

DESIRED ACCURACY: \_\_\_\_\_ 8238

ROUTINE  EXPEDITE

AUTHORIZED BY: \_\_\_\_\_

PREFERRED ORDER OF DETERMINATION	Na		K		Ca		Mg		SiO <sub>2</sub>		Li		SAMPLE MATRIX/COMPOSITION (e.g. pH, MAJOR IONS, ELEMENTS, ETC.)
	EST.		EST.		EST.		EST.		EST.		EST.		
1	W-145534	1012	29		105		64		203		6.4		
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

ANALYST'S SIGNATURE(S):	CODE	DATE	DETER.	METHOD	COMMENTS:
<i>J. Means</i>	19	11-3-83	Na K Ca Mg SiO <sub>2</sub> Li B	ICP	
<i>J. Means</i>	19	11-3-83	Cu Mo Cond	Beta	
"	"	11-4-83	pH CO <sub>2</sub> HCO <sub>3</sub>	titrate	

SUBMITTER'S COMMENTS:

8238

DESIRED ACCURACY:

PREFERRED ORDER OF DETERMINATION	ppm		%		g/l		ppm		ppm		SAMPLE MATRIX/COMPOSITION (e.g. pH, MAJOR IONS, ELEMENTS, ETC.)
	SAMPLE IDENTIFICATION	EST.	EST.	EST.	EST.	EST.	EST.	EST.	EST.		
1	W-14553	133	.391	.680	8.8	<0.002	1.82				
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

ANALYST'S SIGNATURE(S):	CODE	DATE	DETER.	METHOD	COMMENTS:
<u>DS</u>	<u>2</u>	<u>0231</u>	<u>SO<sub>4</sub><sup>2-</sup>, Cl, F</u>	<u>Grav SLE</u>	<u>1.5 hrs</u>

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SUBMITTER'S COMMENTS: \_\_\_\_\_

DESIRED ACCURACY: \_\_\_\_\_ 8236

PREFERRED ORDER OF DETERMINATION	SAMPLE IDENTIFICATION	COND	EST.	PH	EST.	CO <sub>3</sub>	EST.	HCO <sub>3</sub>	EST.	EST.	EST.	SAMPLE MATRIX/COMPOSITION (e.g. pH, MAJOR IONS, ELEMENTS, ETC.)
1	W-14553	3400		8.5		3		504				
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

ANALYST'S SIGNATURE(S):	CODE	DATE	DETER.	METHOD	COMMENTS:
					Sample for pH, CO <sub>3</sub> , HCO <sub>3</sub> very cloudy and would not settle.