

MONITORING WELL CONSTRUCTION DIAGRAM (STICK-UP)

Facility/Project Name Former Cliff Dow Site	Facility Location/Address 100 Wright St. / Lakeshore Blvd. Marquette, Mi	Client Name City of Marquette
Well Name GSI-900A		Date Well Installed 9/21/2009
TriMedia Project Number 99-059		Drill Crew DDM, TJM
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> Piezometer <input type="checkbox"/> Other <input type="checkbox"/>	Location of Well from Source <input type="checkbox"/> Upgradient <input type="checkbox"/> Sidegradient <input checked="" type="checkbox"/> Downgradient <input type="checkbox"/> Not Known	Geologist/Technician DDM
Comments		

A. Well Casing (top elevation) <u>603.23</u> ft	B. Land Surface Elevation <u>599.631</u> ft	C. Surface Seal (bottom) <u>1</u> ft	D. Annular Seal (top) <u>None</u> ft	E. Bentonite Seal (top) <u>1</u> ft	F. Fine Sand (top) <u>None</u> ft	G. Filter Pack (top) <u>6.5</u> ft	H. Screen Joint (top) <u>9.15</u> ft	I. Well Bottom <u>14.15</u> ft	J. Filter Pack (bottom) <u>14.2</u> ft	K. Borehole Bottom <u>14.2</u> ft																				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"> 1 Cap and Lock <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No </td> <td style="width: 50%;"> 2 Protective Pipe <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Length 5' <u> </u> ft Material <u> </u> Steel <input checked="" type="checkbox"/> <u> </u> Other <input type="checkbox"/> Additional Protection <input type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> <tr> <td colspan="2"> 3 Surface Seal Bentonite <u> </u> Concrete <input checked="" type="checkbox"/> <u> </u> Other <u> </u> </td> </tr> <tr> <td colspan="2"> 4 Material between well casing and protective pipe Bentonite <u> </u> Annual Space Seal <u> </u> <u> </u> None <u> </u> Other <u> </u> </td> </tr> <tr> <td colspan="2"> 5 Annular Space Seal Bentonite Chips <u> </u> Bentonite/Cuttings Mixture <u> </u> <u> </u> None <u> </u> Other <u> </u> Insulation: Tremie <u> </u> Gravity <u> </u> </td> </tr> <tr> <td colspan="2"> 6 Bentonite Seal Bentonite Chips <input checked="" type="checkbox"/> <u> </u> <u> </u> 1/4 inch Bentonite Pellets <u> </u> <input checked="" type="checkbox"/> <u> </u> 3/8 inch </td> </tr> <tr> <td colspan="2"> 7 Fine Sand Material Manuf., Prod. Name, and Mesh Size <u> </u> None <u> </u> </td> </tr> <tr> <td colspan="2"> 8 Filter Pack Material Manuf., Prod. Name, and Mesh Size <u> </u> K&E Well Gravel 20/40 <u> </u> </td> </tr> <tr> <td colspan="2"> 9 Well Casing Material <u> </u> Sch 40 pvc <u> </u> <u> </u> Flush Thread <input checked="" type="checkbox"/> <u> </u> <u> </u> Other <u> </u> </td> </tr> <tr> <td colspan="2"> 10 Screen Material Screen type: Factory Cut <input checked="" type="checkbox"/> <u> </u> <u> </u> Sch 40 pvc <u> </u> Other <u> </u> <u> </u> Slot Size <u> </u> 0.1 <u> </u> Slot Length 5' <u> </u> </td> </tr> <tr> <td colspan="2"> 11 Backfill Material (below filter pack) <u> </u> None <input checked="" type="checkbox"/> <u> </u> <u> </u> Other <u> </u> </td> </tr> </table>											1 Cap and Lock <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2 Protective Pipe <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Length 5' <u> </u> ft Material <u> </u> Steel <input checked="" type="checkbox"/> <u> </u> Other <input type="checkbox"/> Additional Protection <input type="checkbox"/> Yes <input type="checkbox"/> No	3 Surface Seal Bentonite <u> </u> Concrete <input checked="" type="checkbox"/> <u> </u> Other <u> </u>		4 Material between well casing and protective pipe Bentonite <u> </u> Annual Space Seal <u> </u> <u> </u> None <u> </u> Other <u> </u>		5 Annular Space Seal Bentonite Chips <u> </u> Bentonite/Cuttings Mixture <u> </u> <u> </u> None <u> </u> Other <u> </u> Insulation: Tremie <u> </u> Gravity <u> </u>		6 Bentonite Seal Bentonite Chips <input checked="" type="checkbox"/> <u> </u> <u> </u> 1/4 inch Bentonite Pellets <u> </u> <input checked="" type="checkbox"/> <u> </u> 3/8 inch		7 Fine Sand Material Manuf., Prod. Name, and Mesh Size <u> </u> None <u> </u>		8 Filter Pack Material Manuf., Prod. Name, and Mesh Size <u> </u> K&E Well Gravel 20/40 <u> </u>		9 Well Casing Material <u> </u> Sch 40 pvc <u> </u> <u> </u> Flush Thread <input checked="" type="checkbox"/> <u> </u> <u> </u> Other <u> </u>		10 Screen Material Screen type: Factory Cut <input checked="" type="checkbox"/> <u> </u> <u> </u> Sch 40 pvc <u> </u> Other <u> </u> <u> </u> Slot Size <u> </u> 0.1 <u> </u> Slot Length 5' <u> </u>		11 Backfill Material (below filter pack) <u> </u> None <input checked="" type="checkbox"/> <u> </u> <u> </u> Other <u> </u>	
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Borehole Data	
Borehole Diameter	<u>2.25</u> in
O.D. Well Casing	<u>0.8</u> in
I.D. Well Casing	<u>0.75</u> in

DDM	Geologist/Technician
TAG	Reviewed



