

N DataVentures

Data Ventures P Ltd.



Product Description Document

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Overview

Geoxpedite is Geological Information System (GIS) that integrate disparate data into a single centralized location which allows different users to collaborate and draw reports at the same time. Centralized database architecture allows multiple users to access the same information simultaneously. Geoxpedite ensures complete accuracy and quality, data integrity and data security with capability to track all transactions done. It has a capability to handle all geological data activities some of them are listed below

- Drillhole Collar Data
- Geological Data
- Geotechnical Monitoring Observations
- Sampling Information and Results

Doesn't matter if you are working from office or are at any remote location, geoxpedite gives you an intuitive and easy to use web interface for dynamic querying and data search facility. Our predefined reports will ease your data need and present it on an easy to understand grid view with capability to export to excel. Our UI is designed to give you more freedom to invest your time in your core business rather than learning a whole new system. Here are some of the key benefits to your business

- Collaboration Across Your Team
- Data Integrity
- Data Security
- Accuracy
- Data Quality
- Efficiency in Data Handling
- Productivity and Less Human Error

Product Description

geoxpedite system is categorized mainly in five modules mentioned below. These five modules are further sub categorized into sub modules.

- 1. Admin Module
- 2. Master Set Up
- 3. Drilling Module
- 4. Geochemical Sampling Module
- 5. QAQC Module

Admin Module

Admin module is designed for administrate the system functionality like creating new user and defining and assigning role rights, adding deleting organizational data like departments designations etc. Admin module is further categorized into sub modules which are mentioned below-

General Administrator

This module facilitates creation of new users and maintains their rights for accessing the system. This module is further categorized into sub categories as mentioned below.

1. Department Master

Department is used to create new department in the company. This will be further used in Employee Master while creating new employee. In Employee Master it is mandatory to define the employee's department. Example: Geology/Mining, Accounts department etc.

Department Master			
Department Name *			Maximum 50 Characters
Status *	Active	O InActive	
Submit Reset Cancel (*) Inc	dicate required Fields		

2. Designation Master

Designation is used to create new designation of the employees. This will be used in Employee Master while creating new employee. In Employee Master it is mandatory to define the employee's designation. Example: General Manager, Manager, Surveyor, Geologist etc.

Designation Master	
Designation Name *	
Department*	BMRC Geology Geology/Geophysics Geology/Mining Geotech IT Mining Survey Tester (temp)
Description	
Justification	
Status*	Active InActive
Submit Cancel Reset	

Here department is must to select to create a new designation. This indicates that this designation belongs to selected department and a single designation can belongs to multiple departments.

3. Employee Master

Employee Master is used to create new employee with his/her basic details like-

- a) First Name, Middle Name, Last Name etc.
- b) Employee ID In this user must enter the company employee number as this will later be used as user ID to access the system. It should be unique.
- c) User has to set his/her strong password and this will be user's login password of the system.

- d) Here is the option to make a Super Admin, who will be assigned to allocate the rights of every user of the system.
- e) If user will not change his/her password within 24 hours, user will be blocked and can be unblocked by admin through Blocked Users page.

Employee Details					
First Name *]	MiddleName		
Last Name *]	Employee ID/ User Name *		
Department Name *	Geology 🔻		Designation Name *	Dy. General Ma	anager 🔻
Email ID *]	Date Of Joining *		
Password *]	Confirm Password *		
Upload Photo *	Choose File No file chosen		Status*	Active	O InActive
Super Admin					
Submit Cancel					

4. Role Rights Master

Role Rights master is used to assign the pages and modules based level of work. This feature restricts the unwanted and unauthorized access to the precious data stored within the system. Without setting rights of user, user can't view anything at home page. Admin can set rights as mentioned below.

- a) Select the employee's name whose roles and rights are to be set.
- b) Select the module names on which user have to work. Then click on search.

Role Rights Master				
Employee Name*		Test User	•	
Module Name		and a state of the		
Ad min Geochemical Sampling Module QAQC Module	 Drilling Module Masters Set Up 	Search		
Cancel				

- c) According to the modules chosen in step b, a list of Menu will be displayed after pressing search button.
- d) Now select the menu on which user has to work. Then click on Save & Next button.

Role Rights Master						
Employee Name*		Test User	•			
Module Name			Menu Name			
Admin Geochemical Sampling Module QAQC Module	 ✓ Drilling Module ✓ Masters Set Up 	Search	 Data Entry (Drilling) Collar Masters Geotech Masters BDS Master 	Import (Drilling) Drill Details Masters Sample Register Masters STS Master	Export (Drilling) Survey Masters Point Load Masters SS Master	Common Masters Geology Masters Geochemical Common Master
			Checked All Menu 🛛 🛛 Y	'es 🔲 No		
Save & Next Cancel						

e) After clicking on Save & Next a window will be displayed below the Save & Next Button.
 Now you can see there is a list of forms with five options to choose from- All, View, Add,
 Edit, Delete, and Export. This is the level of access any user deserves as per the work area.

- f) Admin can set the rights of a form for a particular user like if select **View** only then user can view the records only. User can not Add, Edit, Delete, Export any record.
- g) Similarly if user selects View and Add only then user can View and Add new records but can't Edit, Delete, Export any record.
- h) After selecting forms click on Save Rights for Role button.

Role Rights Master											
Employee Name*		Test User	•								
Module Name			Menu Name								
Admin	Drilling Module		🗹 Data Entry (Drilling)	Import (Drilling)	🕑 Export (Drilling)	Common	Masters			
Geoch emical Sampling Module	Masters Set Up	Search	Collar Masters	Drill Details Masters	Survey I	Masters	Geology	Masters			
QAQC Module		ocarer	Geotech Masters	Sample Register Masters	; 🔲 Point Lo	ad Masters	Geochem	nical Commo	n Master		
			BDS Master	STS Master	SS Mast	er					
			Checked All Menu 🛛 🗎	res 🔲 No							
Save & Next Cancel											
Menu Name			Form Name		All	View	Add	Edit	Delete	Export	
Data Entry (Drilling)	PI	an Drill Hole									^
Data Entry (Drilling)	C	ollar									
Data Entry (Drilling)	D	rill Details									
Data Entry (Drilling)	Su	urvey									
Data Entry (Drilling)	G	eology									
Data Entry (Drilling)	G	eoTech									
Data Entry (Drilling)	H	ydr ogeo logy									
Data Entry (Drilling)	Sa	ample Register									
Data Entry (Drilling)	м	lagnetic Susceptibility									
Data Entry (Drilling)	0	rientation Data									
Data Entry (Drilling)	Po	pint Load									
Data Entry (Drilling)	Ci	ore Photograph									
Data Entry (Drilling)	A	ssays (Drilling)									-
Save Rights For Role Cancel	Select All Form										

5. Email Notification

Email Notification is used to notify users about the transaction done within system. In this page a list of employees with their email is listed. Admin can select those employees who need to be notified about the transactions done by other users. For example, if someone deletes any record from Sample Register then an email will send to all employees who are selected in Email Notification form.

Email N	otification				
Employee	Name	Select	▼ Search		
	Employee ID	Employee Name	Email	Department	Designation
	sachin	sachin c	sachin.c@dvspl.com	Tester (temp)	Trainee
	Test	Test User	smr.jain@gmail.com	Geology	Dy. General Manager
	jc	Jozef Cisovsky	jc@bmrc-emirates.com	BMRC	Associate Resource Geologist
	sameer	sameer jain	sameer@dvspl.com	BMRC	Associate Resource Geologist
	aurum	aurum aurum	cisovsky@gmail.com	BMRC	Associate Resource Geologist
	Rahul	Rahul Shrivastava	rsrivastava@hotmail.com	BMRC	Associate Resource Geologist
	Nagar	Rahul Nagar	er.rahulnagar2008@gmail.com	π	Trainee
	bhati	kapil bhati	kapil.b@dvspl.com	π	Trainee
	vishal	Vishal A	abc@abc.com	п	Trainee
Update	Back				

6. Logging Detail

Logging Detail page lists details of login logout time and duration of their sessions of all users in the system.

Logging Detail									
Logging Status	Select	•	Date						
Employee Name	Se le ct	¥	Search						
Emp Name	IP Address	<u>Login Date</u>	<u>In Time</u>	<u>Out Time</u>	Duration				
sameer jain	192.168.1.8	03-27-2015	12:13 PM						
sameer jain	192.168.1.8	03-27-2015	10:48 AM	12:12 PM	1 Hours : 24 min				
Test User	192.168.1.8	03-27-2015	12:12 PM	12:13 PM	0 Hours : 1 min				
Export to Excel Export to CSV	Back								

7. Reset Password

Admin can reset any user's password by selecting the employee name and then click on Reset Password button. An email will send to respective employee with his/her new password.

Reset Password			
Select Parameter	Name Key Word		Show
	Employee ID	Name	Deaprtment
	vishal	Vishal A	π
Reset password Back			

8. Activity Tracker

Activity Tracker allows the admin to track the user's activity on system. Like on which form he/she working, what button he clicks, does he/she edit/delete any record. So from this form activity of any user of any date can be traced easily.

Activity Tracker						
Employee Name	Test User	•	Logging Date	27-03-2015	Search	
Log	<u>Date</u>		Employee Name	Page Name	Con tro I Name	IP Address
27-03-2015 1:27:00 PM		Test User		Activity Tracker	Search	192.168.1.8
27-03-2015 1:26:00 P M		Test User		Designation	Add New	192.168.1.8
27-03-2015 1:26:00 P M		Test User		RoleRights	Add New	192.168.1.8
27-03-2015 1:26:00 PM		Test User		RoleRights	Cancel	192.168.1.8
Back						

9. Bulk Delete

Bulk Delete can be used to delete bulk records from any table. To delete bulk records select module name Drilling/Geochemical sampling then select the page name from where you want to delete bulk records.

After selecting page name a window will display with the list of all BHID's/Sample Ids. Select multiple ids and click on delete button. All the selected records will be deleted from the table.

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Bulk Delete from	n Selected Page						
Select Module	GeoChemical Sa	mpling 🔻	Bac	k			
Select Page	BDS	•					
Search							
Prospect	Select	•	Samp	le Category	Select	•	Consult
Expl. Licence	Select	•	Samp	led Object	Select	•	Search
Sample ID	 BDS001 BDS002 BDS003 BDS004 BDS005 	 BDS053 BDS054 BDS055 BDS056 BDS057 	 BDS104 BDS105 BDS106 BDS107 BDS108 	 BDS155 BDS156 BDS157 BDS158 BDS159 	 BDS206 BDS207 BDS208 BDS209 BDS210 	 BDS257 BDS258 BDS259 BDS260 BDS261 	 BDS308 BDS309 BDS310 BDS311 BDS312
Delete	Checked All 🗹 Y	es 🗌 No					

10. Recycle Bin

Recycle bin is used to delete already deleted records permanently or restore deleted records from the system. If user deletes any record from any table, it will be stored in recycle bin. Means it will not delete permanently from the system. Now user can delete it permanently from system or can restore that record in its respective table in the system by selecting module name then page name from where he/she wants to delete permanently then a list will display with all deleted records. Thereafter user can select the records and click on delete then records will be deleted from the system permanently. If user want to restore the records, select the records wants to restore the click on Export to CSV button. User can import that CSV file into its respective table.

Recycle	ecycle Bin												
Select Module Drilling 🔻			T	Back									
Select Page			lan Drill	Hole	T								
Delete	BHID	Hole Type	Area	Zone	XCOLLAR Plan	YCOLLAR Plan	ZCOLLAR Plan	DIP Plan	Azimuth Plan	Drilled	Purpose	Plan Depth (m)	Comments
	AUR-TZGEIR001	RC	GEI	2	270000.00	7800000.00	1300.00	90.00	90.00	Yes	MIN	62.00	
Delete	Export To Excel	Export To CSV											

11. Blocked Users

If any user does not change his/her password within 24 hours after new user creation then user will be blocked automatically. Admin can unblock user from this page. If any user does unwanted activity in system, admin can block that user from same page by selecting parameter

If Block any user is selected then list of all employees will be shown and admin can select the user then click on Update, User will be blocked. Admin can unblock any user by selecting Unblock any User from drop down. The list of all blocked user will visible. Select the user which you want to unblock then click on Update button, now user can access the system.

Blocked U	llocked User										
Selected Parameter: UnBlock any user ▼											
UnBlock	Employee ID	Employee Name	Email	Designation							
	vishal	Vishal A	abc@abc.com	Trainee							
Update	Update Back Record Updated Successfully!										

12. Transfer Super Admin

Only one super admin exist in the system who has all the rights to access all modules and sub modules of the system. Super Admin role can be transferred from current super admin to new user by selecting the new user as super admin then click on Update button. Super admin will be changed successfully.

Transfer	Transfer Super Admin								
Super Admin Name: Jozef Cisovsky		ivsky	Email_ld: jc@bn		emirates.com				
Departmen	t	BMRC		Designation:	Associate	Resource Geologist			
Super Admin	Employee II)	Employee Name	Email		Designation			
	sameer		sameer jain	sameer@dvspl.com		Associate Resource Geologist			
	aurum		aurum aurum	cisovsky@gmail.com		Associate Resource Geologist			
	Rahul Rahul Shrivastava		Rahul Shrivastava	rsrivastava@hotmail.com		Associate Resource Geologist			
	Nagar		Rahul Nagar	er.rahulnagar2008@gmail.com		Trainee			
	bhati		kapil bhati	kapil.b@dvspl.com		Trainee			
	vishal		Vishal A	abc@abc.com		Trainee			
	sachin		sachin c	sachin.c@dvspl.com		Trainee			
Update	Back								

13. Log Out User

By this page admin can logout any current user if he is ideal from long time.

Log Out User	bg Out User										
Employee ID	Employee Name	Email	Department	Designation	LogOut						
sameer	sameer jain	sameer@dvspl.com	BMRC	Associate Resource Geologist	LogOut						
Nagar	Rahul Nagar	er.rahulnagar2008@gmail.com	π	Trainee	LogOut						
sachin	sachin c	sachin.c@dvspl.com	Tester (temp)	Trainee	LogOut						
Rahul	Rahul Shrivastava	rsrivastava@hotmail.com	BMRC	Associate Resource Geologist	LogOut						

Map Tables Fields

1. Map Tables

Map Table is used to map the column names of excel template to column name of system database tables of each Import section. If column name of excel template does not match with the column

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name entered in map table's (Lab element section) then user cannot import data. So column names in excel template has to be equal to map tables of Lab element columns. That indicates that the column name of our excel template is equal to column name of our system database.

Map Column Name with Import D)ata File				
Select Imported File	Plan Drill Hole	•	Back		
Field of DataBase				Lab Element	
HoleType				Hole Type	
Area				Area	
Zone				Zone	
Xcollar				XCOLLAR Plan	
Ycollar				YCOLLAR Plan	
Zcollar				ZCOLLAR Plan	
Dip				Dip Plan	
Azimuth				Azimuth Plan	
Drill_Hole_Started	i			Drilled	
Comments				Comments	
PlanDepth				Plan Depth (m)	
Purpose				Purpose	
Project				Project Name	

Update

2. View Updated Records

It is used to track the edited records of Drilling/ Geochemical Sampling modules. Suppose any user edits a Bore Hole id from Plan Drill Hole page, the record before manipulation can be seen here. If any user edits any record by mistake, it can be seen here for correction. It is categorized into two sections –

- Drilling
- Geochemical Sampling

Master Set Up

Master Set Up is a onetime exercise to store your master data in database by which can be used in transaction forms, which enhance accuracy and reduce the duplicity of data. This module is categorized into two sub modules. Master entry is simple data entry in which most of the masters have two fields to enter- Code/Name and their description. However two masters are different and used for validation purpose are explained below.

- Drilling Module
- Geochemical Sampling Module.

Drilling Module

Drilling module is further categorized into some other sub modules as mentioned below.

Common Masters

- 1) Project Master
- 2) Area Master
- 3) QA/QC Master
- 4) Standard Id Master
- 5) QC Verification Master
- 6) Hole Type Master
- 7) Hole Purpose Master
- 8) Hole Diameter Master
- 9) Discontinuities Fracture Density Master
- 10) Zone Master
- 11) Tag Master

Common Technical Masters

- 1) Hole Status Master
- 2) Collar Validations :

This Master is used to set the minimum and maximum value of X Collar, Y Collar, Z Collar, X Collar Station, Y Collar Station, Z Collar Station, X Collar GPS, Y Collar GPS, Z Collar GPS and Depth. User can enter the values (In COLLAR form) between min and max values set in Collar Validations Master.

Collar Validation Master		
	Min Value	Max value
X Collar	240000	270000
Y Collar	7800000	8000000
Z Collar	1200	1700
X Collar Station	240000	270000
Y Collar Station	7800000	8000000
Z Collar Station	1200	1700
X Collar GPS	240000	270000
Y Collar GPS	7800000	8000000
Z Collar GPS	1200	1700
Depth	0.10	1000.00
Update Export To CSV Export To E	xcel Back	

Drill Details Masters

- 1) Contractor Master
- 2) Casing Size Master

Survey Masters

1) Downhole Survey Method

Geology Masters

- 1) Lithology Master
- 2) Color Master
- 3) Mineralization Master
- 4) Oxidation Code Master

Geo-tech Masters

- 1) Defect Origin Master
- 2) Defect Sets Master
- 3) Defect Type Master
- 4) Geo-tech Zone Master
- 5) Infill Min Master
- 6) Infill Strength Master
- 7) Orientation Master
- 8) Rough Master
- 9) Rock Strength Master
- 10) Rock Type Master
- 11) Weathering Master

Sample Register Masters

- 1) Sampling Master
- 2) Sample Type Master
- 3) Sample Category Master
- 4) Sample Conditions Master

QAQC Standard Master

This Master is used to calculate standard deviation of Standard Id for each element. To calculate standard deviation select Standard ID from dropdown, put the name of element and enter the certified and Std deviation values, Standard deviation value of different limits will be calculated automatically. This will help to create QAQC graphs.

QAQC Standard Master									
Standard ID *	OREAS-406 🔻								
Element *	P%								
Certified Value *	0.08500								
Std Deviation *	0.003								
[+2SD] Limit	0.091								
[-2SD] Limit	0.079								
[+3SD] Limit	0.094								
[-3SD] Limit	0.076								
[+1.25%] Limit	0.086								
[-1.25%] Limit	0.084								
[+2% Limit]	0.087								
[-2% Limit]	0.083								
[+5% Limit]	0.003								
[-5% Limit]	0.086								
Update Cancel (*) Marked fields are mandato	ry								

QC Frequency & Length Master

This Master is used to indicate frequency of inserting STD, Duplicate and Blank samples automatically in the Sample Register. Let's say frequency of Sample Id for Standard is 20%, by this every 5th ORIG category should be STD, If frequency of Sample Id for Duplicate is 30%, by this every 3rd ORIG category should be DUP and If frequency of Sample Id for Blank is 25%, by this every 4th ORIG category should be Blank and Length indicates the maximum length between samples.

QC Frequency & Length Master									
Sample Id For STD *	20	(%)	Every 5th ORIG Category should be STD.						
Sample Id For DUP *	30	(%)	Every 3rd ORIG Category should be DUP.						
Sample Id For Blank *	25	(%)	Every 4th ORIG Category should be BLANK.						
Length *	10	(m)	10						
Update Back (*) Marked fields are mandatory									

Sample Sequence Master

Here user can create multiple Sample Number sequences by which user can work on various sample sequences like Core1, RC1, RC2 etc. If any user is working on Core1 sequence then another user cannot use the same sequence at the same time, system will assign another free (which is not used by any user at the same time) sequence automatically.

Sequence Master	equence Master												
SequenceType	MinValue	MaxValue	Hole Type	Delete									
CORE1	1	99999	DDH -	×									
RC1	500001	600001	RC & OTHERS 🔻	×									
RC2	600002	700000	RC & OTHERS 🔻	×									
RC3	700001	800001	RC & OTHERS 🔻	×									
CORE2	101000	102000	DDH 🗸	×									
Add More Submit Back													

Point Load Masters

- 1) Failure Mode Master
- 2) Moisture Master
- 3) Test Type Master
- 4) Dir Applied Load Master

Geochemical Sampling Module

Common Masters

- 1) Prospect Master
- 2) Expl. Licenses Master
- 3) Sample Category Master
- 4) Standard Id Master
- 5) Sampler Master
- 6) Rock Type Master
- 7) Mineral Master
- 8) Moisture Master
- 9) Coordinate Validations Master
- 10) Each Expl. License has its separate coordination. Here we are setting the Easting, Northing, RL (m) minimum and maximum value as validation. To set the values select Expl. Licenses from dropdown and put the Easting, Northing, RL (m)'s minimum and maximum value.

Coordinates Validation:		
Expl. Licences	Select 💌	
	Min Value	Max value
Northing		
Easting		
RL (m)		
Submit Export To CSV Export To	Excel Back	

BDS Masters

- 1) Sampled Object Master
- 2) Sample Type Master
- 3) Sampling Purpose Master
- 4) Regolith Master
- 5) Oxidation Master
- 6) Weathering Master
- 7) Alteration Type Master
- 8) Alteration Intensity Master
- 9) Boxwork Shape Master
- 10) Carbonates Master
- 11) Vein Pattern Master
- 12) Structures Master

STS Masters

- 1) Sample Type Master
- 2) Sampling Purpose Master
- 3) Stream Type Master
- 4) Sediment Composition Master
- 5) Sediment Fraction Master
- 6) Nature Of River Master
- 7) Water Master
- 8) Gradient Character Master
- 9) Stream Order Master
- 10) Packing Master
- 11) Texture Master
- 12) Slit Master
- 13) Pebbles & Cobbles Shape Master
- 14) Sample Site Trap Master
- 15) Trap Quality Master
- 16) Bottom Master

SS Masters

- 1) Sampled Object Master
- 2) Sample Type Master
- 3) Sampling Purpose Master
- 4) Outcrop Lithology Master
- 5) Float Lithology Master
- 6) Soil Horizon Master
- 7) Soil Type Master
- 8) Topography Master
- 9) Soil Texture Master
- 10) Soil Origin Master
- 11) Sample Site Master

Drilling

Data Entry

A brief description of all sections in data entry module is defined below.

1. Plan Drill Hole

Plan Drill hole is used to create new Bore hole ID (BHID). On click on Plan Drill Hole in Menu, User can see previously saved BHID's with edit option.

Plan Drill H	Plan Drill Hole														
Area			Sel	ect	•	5.00		MW	MWA2C001 ^		Orent				
Zone			Sel	ect	•	BHID		MWA2R002		MWA2R002		Ŧ	Search		
BHID	Hole Type	<u>Area</u>	Zone	XCOLLAR Plan	YCOLLAR Plan	ZCOLLAR Plan	Dip Plan	Azimuth Plan	Drilled	<u>Purpose</u>	<u>Plan Depth (m)</u>	Data Entered On	Data Entered By	Edit	Delete
MWA2R002	RC	2/Bravo	BMJ	254175.00	7999652.00	1599.00	86.00	120.00	No	MET	541.00	25-02-2015	DVS	I	×
MWA2C001	DDH	2/Alpha	DSO	240152.00	7952141.00	1541.00	49.00	52.00	Yes	GEOTECH	341.00	25-02-2015	DVS	I	×
Add New	Export to Ex	cel Exp	ort to C	SV Back											

To create new BHID, click on Add New button and follow the validation rules to fill mandatory fields.

Select Prefix (Coming from prefix master), Area (Coming from Area master), Hole type (Coming from Hole type master) and increment of last Bore Hole Number saved in database. Then BHID will be created automatically. Follow the validation rules to submit mandatory fields.

Plan Drill Hole										
внід			Prefix Area MWA Area		Hole Type Bore 3		bre Hole Number Last Hole Number was 2			
BHID	Hole Type	Zone	Purpose	XCOLLAR Plan	YCOLLAR Plan	ZCOLLAR Plan	Up/Dowr	n Dip Plan	Azimuth Plan	Plan Depti
MWA2C003	DDH v	DSO 🔻	RESOURCE 🔻	240000	7800000	1300	Up	▼ 52	60	62
Submit Cancel <u>Val</u>	idation Rules									

2. Collar

On click on Collar section in Menu, User can see already saved BHID's with edit option.

To fill details for new BHID click on Add New Button. Please follow all validation rules to fill the mandatory fields. After filling all the mandatory fields click on submit button to save this BHID in Collar. You can set X Collar, Y Collar, Z Collar, X Collar Station, Y Collar Station, Z Collar Station, X Collar GPS, Y Collar GPS, Z Collar GPS and Depth minimum and maximum limits in Collar Validation Master.

Collar					
BHID	MWA2C001	Project	MWA	Purpose	RESOURCE -
Hole Type	DDH	Area	2/Alpha	Zone	DSO
XCOLLAR T.STATION	245124.00	YCOLLAR T.STATION	7954121.00	ZCOLLAR T.STATION	1574.00
XCOLLAR GPS	245124.00	YCOLLAR GPS	7954121.00	ZCOLLAR GPS	1652.00
XCOLLAR Final	245124.00	YCOLLAR Final	7954121.00	ZCOLLAR Final	1574.00
Survey Source	TOTAL_STATION	Depth (m)	354.00	Target Lithology	Target
Start Date	06-01-2015	End Date	15-01-2015	Hole Status	C1 •
Tramp Metal	Yes 🔹	Fibers Identified	Yes 🔹	Standing Water Table	Upper
Azimuth	45.00	Dip Up 👻	32.00	Checked Checked By	Ves No DVS
Data Entered By	DVS	Comment	This is test		
XCOLLAR Plan	240152.00	YCOLLAR Plan	7952141.00	ZCOLLAR Plan	1541.00
Plan Dip	49.00	Plan Azimuth	52.00	Plan Date	25-02-2015
Plan Depth (m)	341.00	Update Cancel Validation	Rules		

3. Drill Details

On click on Drill Details in Menu, User can see previously saved BHID's with edit option. To add new details for a particular BHID click on Add new Button. User has to follow all validation rules to fill the mandatory fields. After filling all the mandatory fields click on submit button to save this BHID in Drill Details.

Drill Details							
BHID	MWA2C001 -						
From (m) To (m) Hole Type	Hole Diameter Drilling Contractor	Drill Rig	Start Date	Complete Date	Casing	Casing Size(mm)	Drilling Comments Delete
0 5 DDH -	BQ	▼ 89	06-01-2015	15-01-2015	Yes 🔻	60.00 v	
Hole Complete							
Add More Cancel Validation Rules							

4. Survey

On click on Survey in Menu, User can see previously saved BHID's with edit option. To add new details for a particular BHID click on Add new Button. Please follow all validation rules to fill the mandatory fields. After filling all the mandatory fields click on submit button to

Survey BHID MWA2C001 • AT (m) Dip Azimuth Survey Method Survey Company Survey Operator Survey Instrument Magnetic Declination Survey Date Survey Comments Delete 0.00 62.00 62.00 NOM • ABC XYZ ABC Yes 06-01-2015 Additional operator A	save this BHID in Survey.						
BHID MWA2C001 AT (m) Dip Azimuth Survey Method Survey Company Survey Operator Survey Instrument Magnetic Declination Survey Date Survey Comments Delete 0.00 62.00 62.00 NOM ABC XYZ ABC Yes 06-01-2015 X	Survey						
AT (m) Dip Azimuth Survey Method Survey Company Survey Operator Survey Instrument Magnetic Declination Survey Date Survey Comments Delete 0.00 62.00 62.00 NOM ABC XYZ ABC Yes O6-01-2015 X	BHID	MWA2C001 -					
0.00 62.00 62.00 NOM • ABC XYZ ABC Yes • 06-01-2015	AT (m) Dip Azimuth	Survey Method Survey Company	Survey Operator Survey Instrument	Magnetic Declination	Survey Date	Survey Comments	Delete
	0.00 62.00 62.00	NOM • ABC	XYZ ABC	Yes 🔻	06-01-2015	h.	×

5. Geology

On click on Geology in Menu, User can see already saved BHID's with edit option.

To add new details for a particular BHID click on Add new Button. Please follow all validation rules to fill the mandatory fields. After filling all the mandatory fields click on submit button to save this BHID in Geology.

	D MWA2C001 -													
BHID	MWA2C00	01 🔻												
From (m) To (m)	Interval (m)	Litho Code	Color	Grain Size	Oxidation	Description	Min1	Min1%	Min2	Min2%	Min3	Min3%	Min4	
0.00 50.00	50.00	BHJ/ALT	• OR •	MC •	NOBS -	j.	Clay/Sil/Got 🗸	25	Goe/Sil 🔻	25	Goe 👻	25	Jsp	•
50.00 100.00	50.00	BHJ/BMJ	KH •	M •	NOBS -	h.	Hem 🔻	25	Cht/Ferr 🗸	25	Jsp 👻	25	Jsp/Cht	•
100.00 354.00	254.00	CL .	■ BR/GY-GE/GY	MC -	BOCO -		Clay 👻	25	Goe 🔻	25	Cht/Jsp 👻	25	Jsp	•
Hole Complete														

6. Geo-tech

On click on Geo-Tech in Menu, User can see previously saved BHID's with edit option. To add new details for a particular BHID click on Add new Button. Please follow all validation rules to fill the mandatory fields. After filling all the mandatory fields click on submit button to save this BHID in Geo-Tech.

GeoTech -	Core																		
BHID	MWA	20001 👻																	
Interval Data			Core Recovery			Rock Fabri	c				Geotechnical In	terval Data			Orientation		Defect D	ata	
From (m)	To (m)	Length (m)	Recov. Length (m)	Recovery (%)	Core Loss (m)	Rock Typ	pe 1	Weathering	Alter'N	Rock Strength	RQD Length (m)	RQD (%)	No Of Defects	Defect Sets	ORTN Lin Reliability	AT (m)	Defect	Туре	Quan Se
0.00	100.00	100.00	20.00	20.00	80.00	MD	• !	MW 🔻	10	VW 👻	10.00	10.00	2	1 •	1	• 20.00	FR	•	10.00
100.00	200.00	100.00	50.00	50.00	50.00	ιτ	• 1	MW 🔻	10	vw 🗸	10.00	10.00	5	1.5 🗸	3	 ▼ 150.00 	FRAG	•	20.00
200.00	354.00	154.00	20.00	12.99	134.00	GOH	• 5	SW 🔻	20	VW -	25.00	16.23	5	2 -	1	₹ 200.00	FO	•	20.00
Hole Comp	Cancel V	lidation Pule																_	

7. Hydrogeology

On click on Hydro in Menu, User can see previously saved BHID's with edit option. To add new details for a particular BHID click on Add new Button. Please follow all validation rules to fill the mandatory fields. After filling all the mandatory fields click on submit button to save this BHID in Hydro.

Hydrogeology				
BHID	MWA2C003 👻			
Depth of water le	evel (m) Di	ate of Data Capture	Remarks	Delete
20.00	10-03-2015	done	h.	×
40.00	13-03-2015	done	ł	×
Add More Update Cancel	Validation Rules			

8. Sample Register

On click on Sample Register in Menu, User can see previously saved BHID's with edit option. To add new details for a particular BHID click on Add new Button. Please follow all validation rules to fill the mandatory fields. After filling all the mandatory fields click on submit button to save this BHID in Sample Register.

User can change the frequency of STD, DUP and BLANK in Sample Id Interval Master.

User can work on various sample sequences like Core1, RC1, RC2 etc. by using Sample Sequence Master. If any user is working on Core1 sequence then another user cannot use the same sequence at the same time, system will assign another free(which is not used by any user at the same time) sequence automatically.

Sample Registe	er													
BHID			MWA2	C001 👻										
Category	From (m)	To (m)	Length (m)	Sample Id	Sample Type	Sample Method	Original Id dups	Standard Id Std	Sample Weight(g)	Sample Condition	SG	Sampled Date	Sampled By	
ORIG 👻	0.00	10.00	10.00	2	PULP 👻	RIFFLE -		Select 🔻	10.00	D 🔻	No	04-03-2015	David MacDonald	•
ORIG 👻	10.00	20.00	10.00	3	CORE -	SPLITCORE -		Select v	20.00	D •	Yes	04-03-2015	David MacDonald	•
Hole Complete														
Add More Ca	ncel <u>Validatio</u>	on Rules												

9. Magnetic Susceptibility

On click on Magnetic Susceptibility in Menu, User can see previously saved BHID's with edit option. To add new details for a particular BHID click on Add new Button. Please follow all validation rules to fill the mandatory fields. After filling all the mandatory fields click on submit button to save this BHID in Magnetic Susceptibility.

Magnetic Susceptibility								
BHID	MW	/A2C001 👻						
From (m) To (m	ı) Width (m)	MS_Measured (SI x 10-3)	MS_Calc-5point-Average (SI x 10-3)	Instrument	EntryDate	Technician	Comments	Delete
10.00 100.00	90.00	20	20.00	Tuns-989	03-03-2015	albert	h.	×
100.00 150.00	50.00	30	30.00	Tuns-989	03-03-2015	albert	h.	×
Calculate MS 5 point Average								

10. Orientation Data

On click on Orientation Data in Menu, User can see previously saved BHID's with edit option. To add new details for a particular BHID click on Add new Button. Please follow all validation rules to fill the mandatory fields. After filling all the mandatory fields click on submit button to save this BHID in Orientation Data.

Orientation Data												
BHID	MWA	20001 -										
From (m)	To (m)	Interval (m)	Ortn Tool	Mark Quality	Beta From	Line Reliability	Comments					
0.00	10.00	10.00	22	22	22	22						
10.00	20.00	10.00	10	15	15	15						
Add More Update Car	cel Validation Rules											

11. Core Photograph

On click on Core Photograph in Menu, User can see saved BHID's with edit option. Photo name format is specific. Each photo name has to be in the same format like MWA1AC001_(0m-1m)_Wet or MWA1AC001_(0m-1m)_dry.

User can upload bulk photographs by clicking on Bulk Upload link.

Core Photograph						
BHID	MWA2C003					
From (m)	To (m)	Upload for Dry	Upload for Wet	Comments	Preview Photo	Delete
0.00	10.00	Browse_ No file selected. MWA2C003_(0m-10m)_Dry.jpg	Browse_ No file selected. MWA2C003_(0m-10m)_Wet.jpg		Preview Photo	×
10.00	100.00	Browse_ No file selected. MWA2C003_(10m-100m)_Dry.jpg	Browse No file selected. MWA2C003(10m-100m)_Wet.jpg		Preview Photo	×
Add More Undate Can	col Validation Dulos					

Add More Update Cancel Validation Rules

12. Point Load

On click on Point Load in Menu, User can see saved BHID's with edit option.

To add new details for a particular BHID click on Add new Button. Please follow all validation rules to fill the mandatory fields. After filling all the mandatory fields click on submit button to save this BHID in Point Load.

Point L	oad								-											
BHID						M	VA2C001	•												
Core	Size	Depth (m)	Rock Typ	e	Weatheri	ing	Moistu	ire	Test Type		dir Of Applied Load	Platten Separation	Sample Length	Shape Ratio	Load kPa	Load kn	Failure	Mode	Comments	Data Entered By
HQ	•	10.00	М	Ŧ	HW	•	Wet	•	L	Ŧ	Parallel 🔻	12	12.00	12.00	12	12	V	¥	h.	DVS
PQ	•	20.00	σ	Ŧ	SW	Ŧ	Demp	•	D	•	Perpendici 🔻	20	20.00	15.00	15	20	I_Low	•	h.	DVS
Add Mo	ore	Update Cancel	Validation	Rule	<u>'S</u>															

13. Amalgamation

On click on Amalgamation in Menu, User can see saved BHID's with edit option. On click on Amalgamation in Menu, User can see already saved BHID's with edit option. To add new details for a particular BHID click on Add new Button. Amalgamation is the merger of Assay, Geology, Magnetic Susceptibility, Geo-tech and Core Photograph. Geo-tech and Core Photograph are optional. To merge data select a BHID and click on search then save data. Amalgamation data will be saved and data can be used in Tagging Process.



14. Tagging

On click on Tagging in Menu, User can see saved BHID's with edit option. Only amalgamated BHIDs can be used in Tagging. After click on Add New button, search a BHID on the bases of area and zone or select a BHID from checklist and select Tag Type (DSO/Jaspilite) which is mandatory then click on search. Select Tag, Sub Tag, Comp Tag and submit the data.

Т	agging																					
A	rea		Se	lect	•	Const	b	PUID	V N	1WA2C0	001						^ _	an Tana	V D	SO	Draviaw	ata .
Z	one		Se	lect	•	Searc		BIIID									Ŧ	ag type	ja	aspilite	Freview D	ata
	Tag		Sub 1	ſag	Comp Tag	BHID	Area	Zone	From (m)	To (m)	Length (m)	Litho Code	Recovery(%)	RQD(%)	SAMPLE ID	Fe%_Calc	Fe2O3/%/	SiO2/%/	AI2O3/%/	P2O5/%/	LOI/%/-1050/1000	LOI-37
	UM	Ŧ	None	•	UM	- MWA2C001	2/Alpha	DSO	0.00	10.00	10.00	BHJ/ALT	20.00	10.00	2	58.41	83.51	33.50	2.45	0.11	10.40	
	UM	•	None	•	UM	- MWA2C001	2/Alpha	DSO	10.00	20.00	10.00	BHJ/ALT	20.00	10.00	3	65.95	94.30	28.80	3.37	0.12	10.40	
Ē	Save	Can	cel																			

Import

Import section is same as data entry section with only difference, in Data Entry user can directly input data through web forms and in Import user has to put data in excel template to import. Please follow the validation rules to import the data for all sections. User can download the template from Download Template link and upload data by clicking on Upload Button.

1. Assay Raw Import

In Assay Raw user can import lab report directly by using csv template. Sample Ids in import file has to be matched with sample register existing sample ids.

Import Assay Raw		
Browse_ No file selected.	Upload Back	Download Template

2. Assay Processed Import

In this section user can import old existing data.

Import Assay Processed This is only for purpose of testing application. Data imported using this section will not appear in Sample Register!				

QAQC

The overall conclusion of this application is QAQC Report. This report is used to

- 1) To document the procedures and methods of sample collection, preparation and analysis.
- 2) To provide assurance as to reliability of analyses using replicate samples, cross-laboratory checks.
- 3) To provide assurance as to the precision and accuracy from duplicate samples.
- 4) To provide assurance as to the accuracy from using recognized reference standards.
- 5) To provide a chain of custody of samples.



Other Security Features

- Secure password protection with access control.
- User will be locked if he enters wrong password three times.
- New password should not be same as last three passwords.
- 2 Users cannot work on one transaction form simultaneously, which enhance data accuracy.
- 2 users cannot work on same BHID and Sample Id simultaneously, which enhance data accuracy.
- A user cannot access system on two different machines at the same time.
- On delete/Edit of any record a mail will go to super admin with details of record.
- 100% traceability of all user activity.
- On deletion of any record on any transaction forms, will send data into a recycle bin, which can be restored later is required.