

# Khewra Salt Mine

*by* Kirmani Primavera Project

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## 1. KHEWRA SALT MINES

Khewra Salt-Mine is the oldest and pioneers of all the Salt Ranges discovered yet. It's the Pakistan's Largest and second largest in the World's Salt Range.

Salt is present in asymmetrical dome structure form. Coated with 7 thick layers which thickness is about 151meters. Somewhere up to 99.1% rock salt found in its pure form.

Salt is of different colors i.e. translucent, whitish, pinkish, reddish composed of different properties & qualities. In certain prospects it is in crystalline form. In mines there are attractive, alternative and crystalline bands in reddish and whitish salt color.

- History of salt mines of Khewra, it started trading in Era of Mughal. But its finding by troops of Alexander's back in 320 BC.
- PMDC take control of salt mine after the independence back in 1947.
- Around about 350,000 tons per year production.
- Reserves of salt by estimations shows variation from about 80 million tons to 600 million tons.
- It has 19 stories of mining range with 11 working levels till now among which, there is a tourist level also.
- Length of all mining cave is more than 40 kilometers.
- 250,000 visitors a year for tourism purpose

## 1.1 LOCATION

<sup>7</sup> The **Khewra Salt Mine** is located in Khewra, North of Pind Dadan Khan, District Jhelum, Region Punjab, Pakistan. The mine is located at an external range of Himalaya Mountains.

- Approximate 288 meters above sea level.
- Area is about 110-kilometer square.

## 1.2 PRODUCTION

<sup>2</sup> Total reserves of salt in the mines range from 82 million tons to 600 million tons by approximation. The raw form of salt contains almost zero drops of Magnesium, Calcium, Potassium, Sulphates and moistures with Iron, Zinc, Copper and Manganese. Khewra mine salt is of different colors i.e. red, pink, off-white or transparent.

- In 2003, Salt production was about 385,00 tons per annum, producing nearly half of Pakistan's Salt production.
- By this rate, the salt range would last for approximately 350 years more.
- Mine is composed of more than eighteen stories in which eleven are below ground.
- Mine extended around 730 meters.
- Room & pillar method is used for quarrying so the upper levels don't fall down.
- The temperature of mine inside is 18–20 °C which remains almost same throughout the year.

<sup>2</sup> In 2008, Government of Pakistan decided to sell off all money-making organization which includes Khewra Mine as well but the plan was deferred.

## USE

Salt of Khewra is best rock salt of Pakistan.

- This salt is mainly use for our industries in a raw form or it uses in our homes as well for cooking purpose.
- In 1940 plant was established of Soda Ash.
- Salt ores are used for ornamental items making.

### 1.3 TOURISM

Khewra salt mine is an attraction point for tourists, earning a considerable profit from tourists round about 250,000 visitors visit in a year. Visitors visit the mine through the Khewra salt mines railway. Inside the Khewra mines there are many ponds of salty water. In the mining tunnels, about fifty years ago Badshahi mosque was constructed with multicolor salt bricks. Artistic craving was made which include a model of Minar-e-Pakistan or a statuette of Allama Iqbal. In 2003, at a cost of 9 million rupees for visitor's facility and to attract the tourists two phases of expansion were approved. A medical ward for respiratory disease patient treatment by salt therapy were established with 20 beds facility which costs 10 million rupees back in 2007. In 2007 a train safari visit was encompassed by the "Visit Pakistan Year 2007" event for Khewra salt mine. Pakistan railways-initiated trains for visitors from Rawalpindi to Khewra and from Lahore to Khewra. Railway station of Khewra was restored by private firm help.

## 1.4 TOURIST RESORT

Dr. Wrath established the main tunnel at ground level which has been changed into Tourist Resort back in 1872. Every year most of the visitors come Khewra Salt Mines. Captivated by the Mine attractiveness from inside.

<sup>1</sup> They are captivated by nature's attractiveness inside the mountain. Khewra has been established a tourist point in which 230,000 to 240,000 visitors visit every year in which students, public and people of foreign countries visit the Salt Mines.

By looking at the interest of tourists. In February 2002, <sup>1</sup> The PMDC Management launched "Khewra Salt Mines Resort Development Project" with an estimation of cost Rs.4.2 million which now has been amplified by another Rs.3 million.

PMDC developed a Khewra Salt Mines Visitors Resort by using their own resources. A mosque has been built by using different shades of rock salt, walls of salt bricks when illuminates gives a mesmerizing view. There is a compartment known as "Assembly Hall" is about 75m high and it captivates the visitors. Chamber is filled with brine solution. Different ponds when light illumined give such a beautiful look. There is a "Shish Mahal" which was made of transparent salt of light pink color. The development predicts creation of following services at Khewra Salt Mines in the first stage which now has been completed at the first phase of development.

## 1.5 Creation of Reception hall

A room for welcoming the tourists having reception point for visitors.

WALK: The walkway from the reception / information room to the Mine mouth has been built for visitors.

<sup>1</sup> SOUVENIR SHOP: For the ease of visitors, a souvenir shop has been opened where they can purchase and view different creative work on salt ores like lamps.



## 1.6 Means of Lighting

<sup>1</sup> The mines have been illuminated on a large scale with elegant and reflective illuminations to increase the fundamental beauty of the mine's highlights, its interior appearance and the feel of rock salt.

## 1.7 Electric Tram

Inside the mine up to main junction electric train facility are available for tourists.

There is also a ticket price for it which Rs 50

It facilitates the tourist and gives a brief tour inside the mine.

## 1.8 Other Projects

<sup>2</sup> In 1971 The Pakistan Mineral Development Corporation recognized the Mining inspection institute at Khewra. Mining related surveys are conducted by this institute or introduced different courses regarding Mining, high school or college for women are established in Khewra. This institute won an environmental case for the supply of pure drinking water which can be used by people. The inhabitants which are leaving in the surrounding of Khewra facing water problems which are polluted by coal and salt. Most importantly this case is studied internationally or it as good to study regarding connection with people and environment.

## 1.9 ABOUT PMDC

<sup>3</sup> PMDC is a self-governing establishment under the managerial control of Petroleum and Natural Resources Ministry of Government of Pakistan. It was established in 1974 with permissible capital of Rs. 1,000 million to upsurge and benefits the mineral development activities throughout the whole country.

It is involved in the exploration and evaluation of economic mineral deposits, preparation of technoeconomic practicability and commercialization documents.

Under PMDC <sup>7</sup> 4 coal mines, 4 salt mines are functional. From salt production PMDC share 58% salt throughout the nation.

### 1.9.1 OBS of PMDC:



## 2 <sup>5</sup> PROJECT MANAGEMENT

**Project management** is the actual performance of initiation, forecasting/planning, execution/implementing, controlling and concluding/closing (the process groups). A team composed of different members belonging to different fields acts as a team and attain specific objectives and encounter <sup>5</sup> success criteria at the defined time period. The key challenge of project



management is to attain all project objectives inside the given limitations specially schedule and budget. This info is generally defined in the project documentation, created at the start of the development procedure.

The key limitations are scope, time, quality and budget. The second challenge is of effectively use of resources to achieve the defined <sup>5</sup> objectives.

The objective of project management is to produce a comprehensive project that encounters the customer's requirement. By make a report in a shape or reform the report which can easily address the client requirements. Once the customer objectives are evidently recognized, they must impact all verdicts <sup>6</sup> made by other people involved in the project. Project management objectives that are poorly defined or too strict are unfavorable to policymaking.

In Project Management:

## 2.1 <sup>12</sup> Process groups

- Initiate
- Planning
- Executing
- Monitoring and Controlling
- Closing

### 2.1.1 Initiation

The commencement processes which deduce the nature and scope of the project. If this phase is not ended well, it is doubtful that the project will prosper in meeting the requirements of the business. The initiation process needed here to understand the business atmosphere and ensure that all necessary controls are merged into the project. Shortages or any deficiencies should be reported and made recommendation to resolve them.

The initiating phase should embrace a plan that covers the following areas. These areas can be listed in a series called project initiation documents.

- Project proposal
- Project Scope
- WBS (Work Breakdown Structure)
- RACI (Responsibility Assignment Matrix)
- Project Charter
- SWOT analysis.

### 2.1.2 Planning

After the initiation phase, the project is planned with an proper level of aspect (flow chart). The key objective is to strategize the time, cost and capitals in a suitable way to estimate the essential work and efficiently manage the risk throughout the project. As with the Initiation development group, the lack of proper planning significantly lessens the project's chances of successfully attaining its objectives.

Project planning normally comprises of

- Developing Scope Statement
- Make a Planning team
- Create WBS and identify deliverables
- Create those activities which can attain those deliverables and align the activities sequentially.
- Resource estimates for activities.
- Time and cost estimation.
- Scheduling.
- Budgeting.
- Quality Assurance plan.
- Risk Planning

### 2.1.3 Execution

While implementing we must recognize what are the strategic terms that must be implemented. The implementation phase ensures that the deliverables of the project management plan are implemented accordingly. This phase includes the suitable distribution, coordination and management of human resources and any other capitals, such as materials and budgets. The result of this stage is the project deliverables.

#### 2.1.4 Monitoring and controlling

Monitoring and control consist of those procedures carried out to witness the implementation of the project, so that major problems can be recognized in a timely manner and corrective measures can be taken to mitigate any negative outcomes when needed, to control the implementation of the project.

Monitoring and control include:

- Ongoing measurement of activities.
- Against the project management plan monitor the project variables i.e. Cost, scope etc.
- Corrective actions identify for any non-conformance occur

#### 2.1.5 Closing

Closing comprises the proper acceptance of the project. The doings of admin include files and documents.

This stage consists of:

- Contract closure
- Project closure

## 2.2 Knowledge areas:

- Integration
- Scope
- Schedule
- Risk
- Resource
- Procurement
- Cost
- Quality
- Stakeholder
- Communication

Each knowledge area has its own importance and is linked with process group.  
Together this Process groups and Knowledge areas gives us Process

### 3 PRIMAVERA

**Primavera** is a portfolio management software for business projects. It contains project management, programming, risk scrutiny, opportunity managing, resource managing, collaboration and control capabilities, and fit in with other business Softwares such as Oracle and SAP ERP systems.



#### 3.1 Interface of Primavera

Primavera Interface was studied as a whole.

Different aspects were studied and practiced, activities, Gantt chart, bar option, user preferences, admin preferences, details, relationships between activities, and much more were studied.

Its interface was quite simple and is used vastly in majority of major industries for Planning purpose.



## Primavera P6

Primavera P6 Professional 18.1 (KHEWRA SALT MINE PROJECT)

File Edit View Project Enterprise Tools Admin Help

Activities

#	Activity ID	Activity Name	Original Duration	Start	Finish	Resources	Budgeted %
1	1	KHEWRA SALT MINE PROJECT	18w	Dec-07-19 A	Feb-05-20		1,062,500.00
2	1.1	1.1 Initiation	18w	Dec-07-19 A	Feb-06-20		254,000.000
3	1.1.1	1.1.1 Project Start	0w	Dec-07-19 A	Dec-07-19 A		0
4	A1000	Project Start	0w	Dec-07-19 A	Dec-07-19 A		0
5	1.1.5	1.1.5 Feasibility Study	10w	Dec-05-19 A	Feb-06-20		254,000.000
6	A1010	Site Feasibility Checking & Survey	3w	Dec-05-19 A	Dec-27-19 A	Head Electrical Engineer, Head C	168,000.000
7	A1020	Soil Investigation	6w	Dec-05-19 A	Dec-11-19	Head Civil engineer, Assistant E	24,000.000
8	A1030	Structural Design of Tunnel	12w	Jan-20-20 A	Jan-23-20	Head Civil engineer, Assistant E	24,000.000
9	A1040	Electrical Design	9w	Jan-20-20 A	Feb-06-20	Head Electrical Engineer, Assat	24,000.000
10	A1080	Mechanical Design	9w	Jan-20-20 A	Feb-06-20	Head Mechanical Engineer, Ass	24,000.000
11	1.2	1.2 Planning	20w	Feb-06-20	Aug-19-20		230,400.000
12	A1045	Stakeholder Engagement Preparation	1w	Feb-06-20	Feb-17-20	Project Manager	5,600.000
13	A1050	Activities Planning	3w	Feb-17-20	Mar-09-20	Head Civil engineer, Head Mech	36,000.000
14	A1060	Cost Planning	3w	Mar-09-20	Mar-30-20	Head Electrical Engineer, Head C	36,000.000
15	A1085	Quality Management Planning	3w	Mar-30-20	Apr-20-20	Monitoring Officer, Quality Engne	32,000.000
16	A1070	Methodology Preparation	4w	Apr-20-20	May-19-20	Head Electrical Engineer, Head C	36,000.000
17	A1090	Procurement Planning	3w	May-19-20	Jun-05-20	Store Incharge	20,000.000
18	A1100	Machinery and Equipment Allocation Planning	3w	Jun-05-20	Jun-25-20	Head Civil engineer, Head Docto	12,000.000

General Status Resources Predecessors Successors Relationships Expenses Feedback

Activity Project

Resource ID Name	Primary Resource	Resource Type	Remaining Units / Time	Original Lag	Start	Finish	Budgeted Units	Actual Regular Units	Remaining Units / Rate
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Add Resource Add Role Assign by Role Remove

## Menu and Tools Bar

P6 Primavera P6 Professional 18.1 (KHEWRA SALT MINE PROJECT)

File Edit View Project Enterprise Tools Admin Help

This Portion is called **Table** where Project activities are

Activities							
Layout: Classic Schedule Layout				Filter: All Activities			
#	Activity ID	Activity Name	Original Duration	Start	Finish	Resources	Budget
10	A1080	Mechanical Design	9w	Jan-20-20 A	Feb-06-20	Head Mechanical Engineer, Assi	24,000
11	<b>1,2 Planning</b>		<b>28w</b>	<b>Feb-06-20</b>	<b>Aug-18-20</b>		<b>238,400</b>
12	A1045	Stakeholder Engagement Preperation	1w	Feb-06-20	Feb-17-20	Project Manager	5,600
13	A1050	Activities Planning	3w	Feb-17-20	Mar-09-20	Head Civil engineer, Head Mech	36,000
14	A1060	Cost Planning	3w	Mar-09-20	Mar-30-20	Head Electrical Engineer, Head C	36,000
15	A1065	Quality Management Planning	3w	Mar-30-20	Apr-20-20	Monitoring Officer, Quality Engine	32,000
16	A1070	Methodology Preparation	4w	Apr-20-20	May-18-20	Head Electrical Engineer, Head C	36,000
17	A1090	Procuremnt Planning	3w	May-18-20	Jun-05-20	Store Incharge	20,000
18	A1100	Machinery and Equipment Allocation Planning	3w	Jun-05-20	Jun-25-20	Head Civil engineer, Head Docto	12,000
19	A1110	Manpower and Staff Allocation Planning	3w	Jun-25-20	Jul-15-20	Head Civil engineer, Head Docto	8,400
20	A1120	Risk Analysis and Mangement	3w	Jul-15-20	Aug-04-20	Head Civil engineer, Head Docto	20,400
21	A1130	Communication Management	2w	Aug-04-20	Aug-18-20	Monitoring Officer	32,000
22	<b>1,3 Execution</b>		<b>139w</b>	<b>Jun-05-20</b>	<b>Feb-02-23</b>		<b>8,228,100</b>
23	1,3,1 Procurement		9w	Jun-05-20	Aug-07-20		2,188,800
24	1,3,2 Pre-Site Development		36w	Jul-17-20	Mar-26-21		2,392,000
25	1,3,3 Tunnel Construction		85w	Aug-21-20	Apr-08-22		4,747,940
26	1,3,5 Processing Facility Construction		59w	Mar-26-21	May-13-22		1,697,200
27	1,3,4 Salt Extraction and Processing		43w	Apr-08-22	Feb-02-23		7,202,160



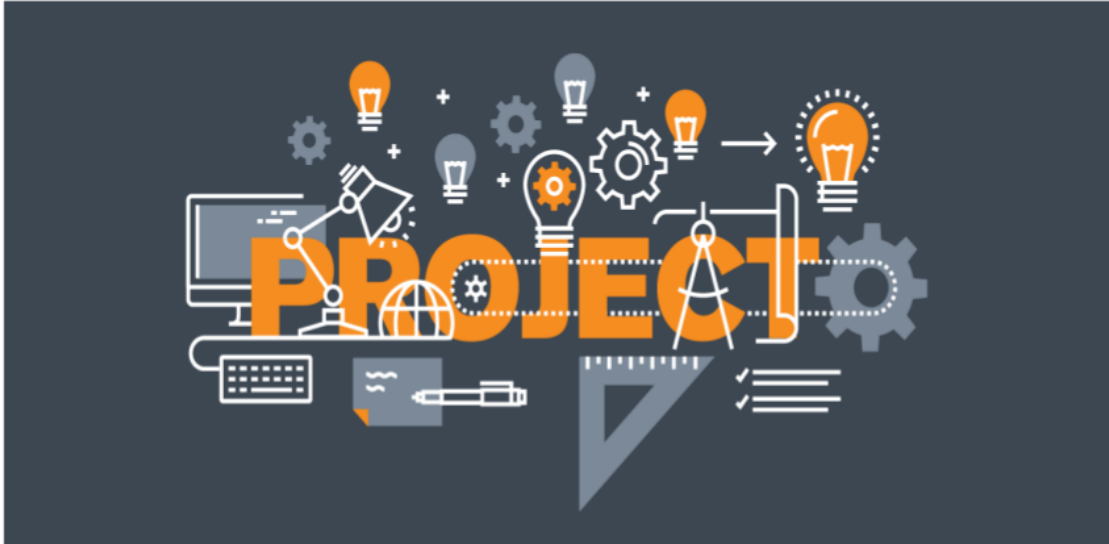
### 3.2 Primavera vs MS Project

Microsoft Project helps in project

<b>Primavera</b>	<b>MS Project</b>
<ul style="list-style-type: none"><li>• Supports Multiple Users</li></ul>	<ul style="list-style-type: none"><li>• Doesn't Support Multiple Users</li></ul>
<ul style="list-style-type: none"><li>• Unlimited baselines</li></ul>	<ul style="list-style-type: none"><li>• Limited Baselines</li></ul>
<ul style="list-style-type: none"><li>• Risk and Issue feature</li></ul>	<ul style="list-style-type: none"><li>• Lacks Risk and Issue</li></ul>
<ul style="list-style-type: none"><li>• Can generate HTML's</li></ul>	<ul style="list-style-type: none"><li>• Can't generate HTML's</li></ul>
<ul style="list-style-type: none"><li>• Sub activities are supported</li></ul>	<ul style="list-style-type: none"><li>• Sub Activities aren't supported</li></ul>
<ul style="list-style-type: none"><li>• Multiple relationships between activities</li></ul>	<ul style="list-style-type: none"><li>• Does not support multiple relations</li></ul>
<ul style="list-style-type: none"><li>• Supports multiple project creation, tracking and viewing</li></ul>	<ul style="list-style-type: none"><li>• Does not support multiple project creation</li></ul>
<ul style="list-style-type: none"><li>• Sorting feature is present according to activity, activity ID, Schedule</li></ul>	<ul style="list-style-type: none"><li>• Sorting is done where you need the activity</li></ul>
<ul style="list-style-type: none"><li>• Multiple costs like expense cost can be added</li></ul>	<ul style="list-style-type: none"><li>• Does not let the expense cost to be added</li></ul>
<ul style="list-style-type: none"><li>• Supports 200 columns</li></ul>	<ul style="list-style-type: none"><li>• Supports 40 columns</li></ul>
<ul style="list-style-type: none"><li>• Supports large number of activities</li></ul>	<ul style="list-style-type: none"><li>• Less activities as compared to primavera</li></ul>

#### 4 Project:

A project has been planned where the mobilization of Project team will be done with all the required materials needed at Khewra Salt Mine Range where Salt's Mine are present.



Proper pre planning would be done, milestones are going to be targeted to attain objectives of Mining.

Planning is mainly done on primavera.

The process began by:

## **4.1 Pre Initiating**

- Determine Scope, Schedule and Cost
- Identify Sponsor
- Select Project Manager
- Business Case
- Review process with Project manager and Sponsor

### **4.1.1 Scope, Schedule and Cost**

#### **Scope**

To mobilize project team and install mining process for salt extraction to fulfill needs as per requirement

#### **Cost**

Budgeted cost as of Jan 16,2020 is

#### **Schedule**

June 15,2023

## 4.1.2 Stakeholder Register

Name	Position /Role	Organization	Internal / external	Contacts	Supports / Neutral / Resists	Major Requirement	Main Expectation
Abdul Rehman	Project Manager	PMDC	internal	E-mail:xyz@gmail.com Phone: Address:	supports	To execute project successfully	
M.Ashtiaq	Management Team	PMDC	internal	E-mail: Phone: Address:	supports	To achieve objectives	
Mr. Usama	Management Team	PMDC	internal	E-mail:xyz@gmail.com Phone: Address:	supports	To achieve objectives	
Mr. Rana faisal	Management Team	PMDC	internal	E-mail:xyz@gmail.com Phone: Address:	neutral	To achieve objectives	

### 4.1.3 Project charter.

Project Charter					
Bahria University Lahore					
<b>Project Authorization</b>					
<b>Organization:</b>	Bahria University Lahore Campus	<b>Champion:</b>	Sir. Shahzad (Senior Asst. Professsor)	<b>Process Owner:</b>	Bahria University Management
<b>Project Title:</b>	Khewra Salt Mine			<b>Project Number:</b>	ABC-MSPM/III-A-2020
<b>Critical Success Factors:</b> Project Schedule, Food Quality, Management, Efficient use of resources.					
<b>Project Objective:</b> To make Khewra Salt Range a place where Mining Process is done to extract Salt, Process that salt and transport to warehouses. Mobilize whole Project Team on it and provide enough facilities so they can make mining an operation there.					
Effective Team work Salt Extraction Economic Benefits Tourism Effective Communication					
Approval Date:	07/12/19	Project Champion		Project Owner Signature:	
Target Completion Date:	3/2/2023	Project Leader:		Financial Analyst:	
<b>Project Organizing Team</b>					
<b>Name</b>	<b>Role</b>	<b>e-mail</b>	<b>Phone</b>		
Abdul Rehman	Project Manager	xyz@gmail.com	03xx-xxxxxxx		
Mr. Ashtiaq	Management Team	xyz@gmail.com	03xx-xxxxxxx		
Mr. Waleed Kirmani	Management Team	xyz@gmail.com	03xx-xxxxxxx		
Mr. Usama	Management Team	xyz@gmail.com	03xx-xxxxxxx		
Mr. Rana Faisal	Management Team	xyz@gmail.com	03xx-xxxxxxx		
Miss Fehmida	Management Team	xyz@gmail.com	03xx-xxxxxxx		
Miss Hareem	Management Team	xyz@gmail.com	03xx-xxxxxxx		
Mr. Qasim	Management Team	xyz@gmail.com	03xx-xxxxxxx		
Mr. Haider	Management Team	xyz@gmail.com	03xx-xxxxxxx		
Mr. Faisal Khan	Management Team	xyz@gmail.com	03xx-xxxxxxx		
<b>Project Definition and Scoping</b>					
Project measures: Time, Budget					
Critical to Customer Satisfaction: Project Objective, Time Constraint, Quality					
Defect Definition: Project Lag Time, Ineffective Communication					
<b>Inside Scope of Project:</b> Mobilize at Khewra, Dig a hole and make a min, Extract Salt, Process and Transportaion of Salt			<b>Outside Scope of Project:</b>		
<b>Goals and Benefits</b>					
<b>Defect Levels/Goals:</b>	<b>Date / Time</b>	<b>Milestone 1</b>	<b>Milestone 2</b>	<b>Milestone 3</b>	<b>Milestone 4</b>
Start Baseline:	7/12/2019 - 6:15 AM				
Goal:	Sharp at designated Time	Procurement	Mobilization	Mining	Processing and Transporting



#### 4.1.4 Assumption Log

Project Name	Khewra Salt Mine	Date	Dec 07, 2019
Project Number	123	Document Number	
Project Manager	Abdul Rahman	Project Owner/Client	Mr. Shehzad Ahmad

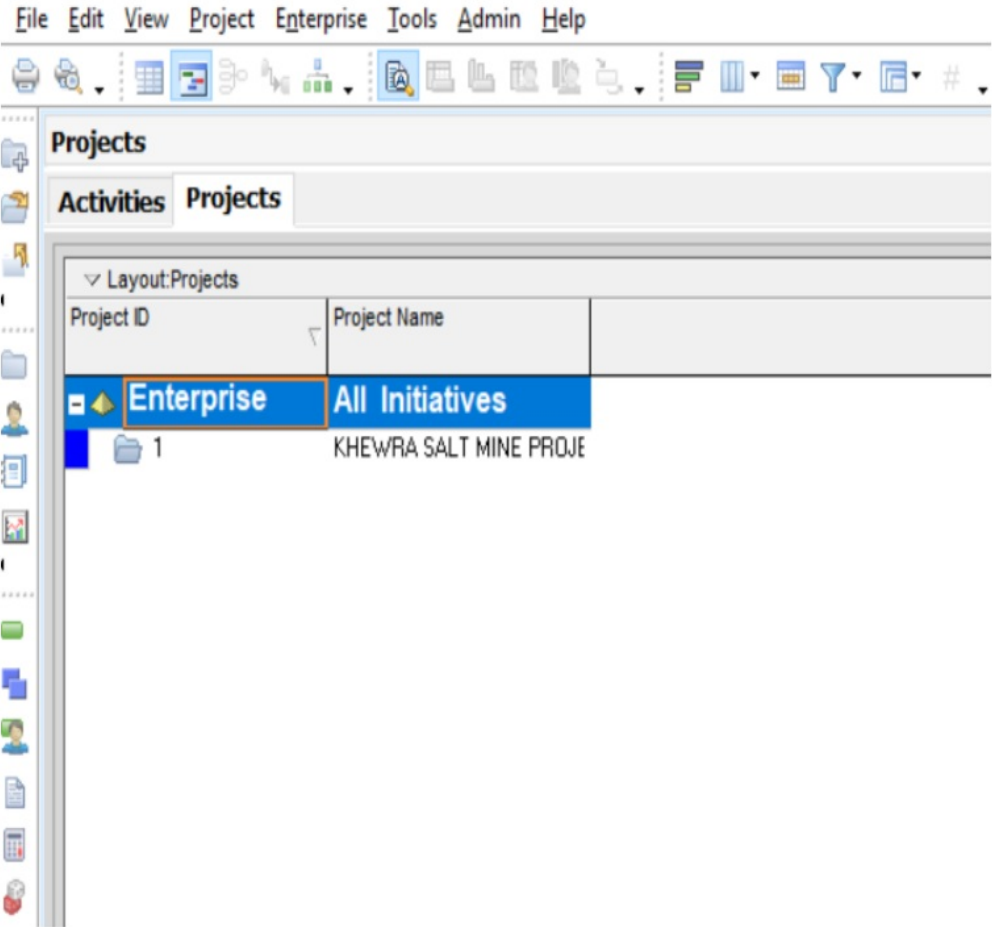
Assumption Number	Date Identified	Assumption	Validation Assigned To	Validation Due Date	Assumption Valid? Y/ N	Status / Comments
01	12/12/19	People already living nearby	Khewra's Development Authority	9/12/19	Y	Closed
02	2/12/19	PMDC don't give us approval	PMDC & Project Manager	9/12/19	N	Open
03	7/12/19	Project Team is hesitated to mobilize at Khewra Mine	SPONSOR	2/12/19	Y	CLOSED
04	9/12/19	Non-Availability of Transport during Mobilization	Logistic Manager	9/12/19	N	CLOSED
05	9/12/19	Soil of low quality	Quality Team	9/12/19	Y	OPEN

## 4.2 Data Gathering

Data was gathered:

- Teams were made and Meetings were held
- Brainstorming, Checklist, Focus Group and Interviews will be conducted.
- Environmental Conditions and Organizational Process Assets would be look forward.
- Tools and Techniques would be required
- After all this a Plan is developed known as Project Management Plan where almost all the knowledge areas will be addressed
- Finally, Plan was done on Primavera P6 by making activities under WBS, assigning resources with a budget & scheduling activities

**4.3 Project “Khewra Salt Mine” was created under EPS.**



## 4.4 User Settings

Proper Units were given

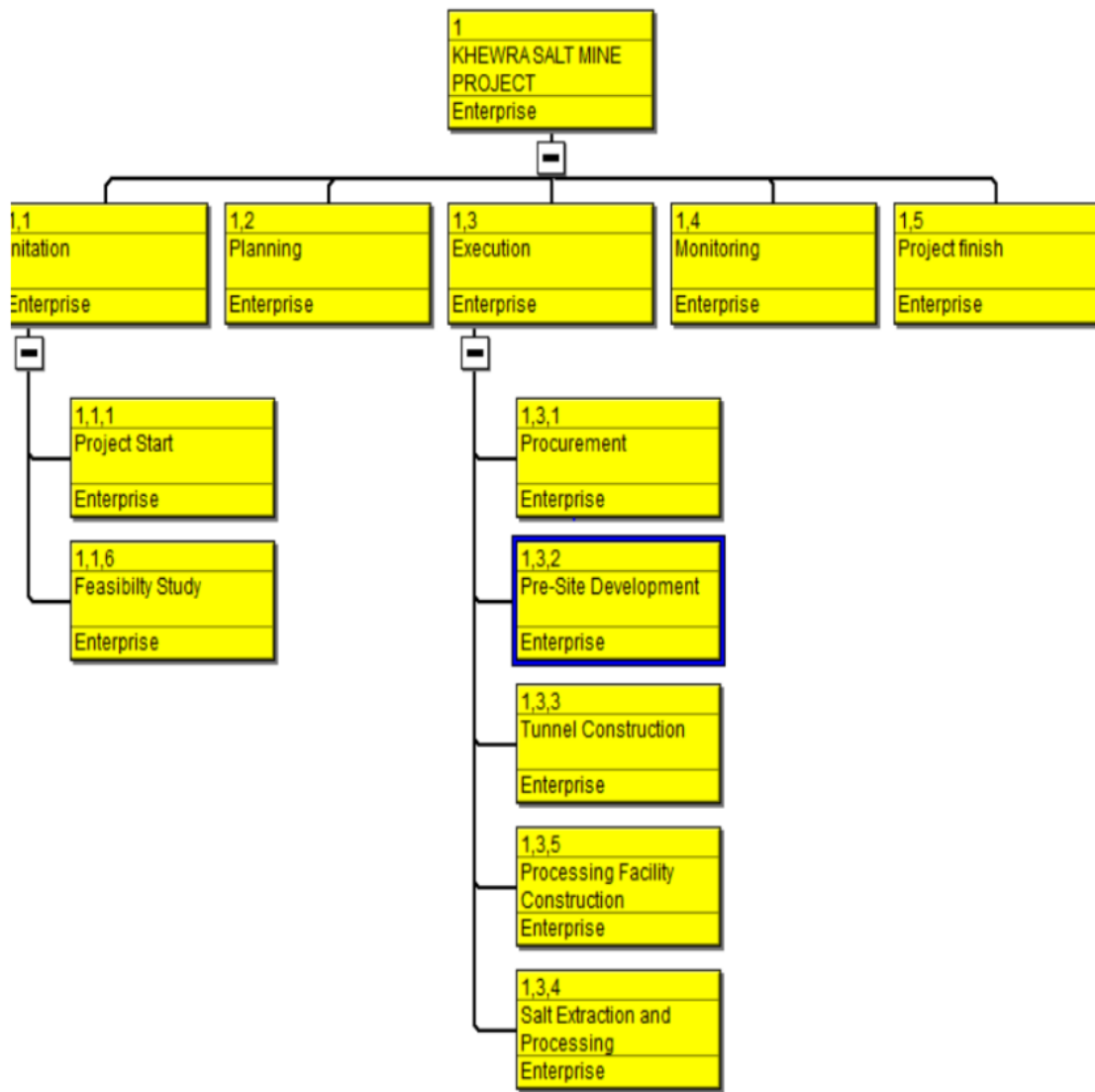
Time Units	<b>Units Format</b>
Dates	Unit of Time: Week <input type="checkbox"/> Days
Currency	Decimals: 0
Assistance	<input type="checkbox"/> Show Unit label Example: 1
Application	<b>Durations Format</b>
Password	Unit of Time: Week <input type="checkbox"/> Days
Resource Analysis	Decimals: 0
Calculations	<input checked="" type="checkbox"/> Show Duration label Example: 2w
Startup Filters	<b>Units/Time Format</b>
	Resource Units/Time can be shown as a percentage or as units per duration
	<input type="radio"/> Show as a percentage (50%)
	<input checked="" type="radio"/> Show as units/duration (4h/d)

## 4.5 WBS

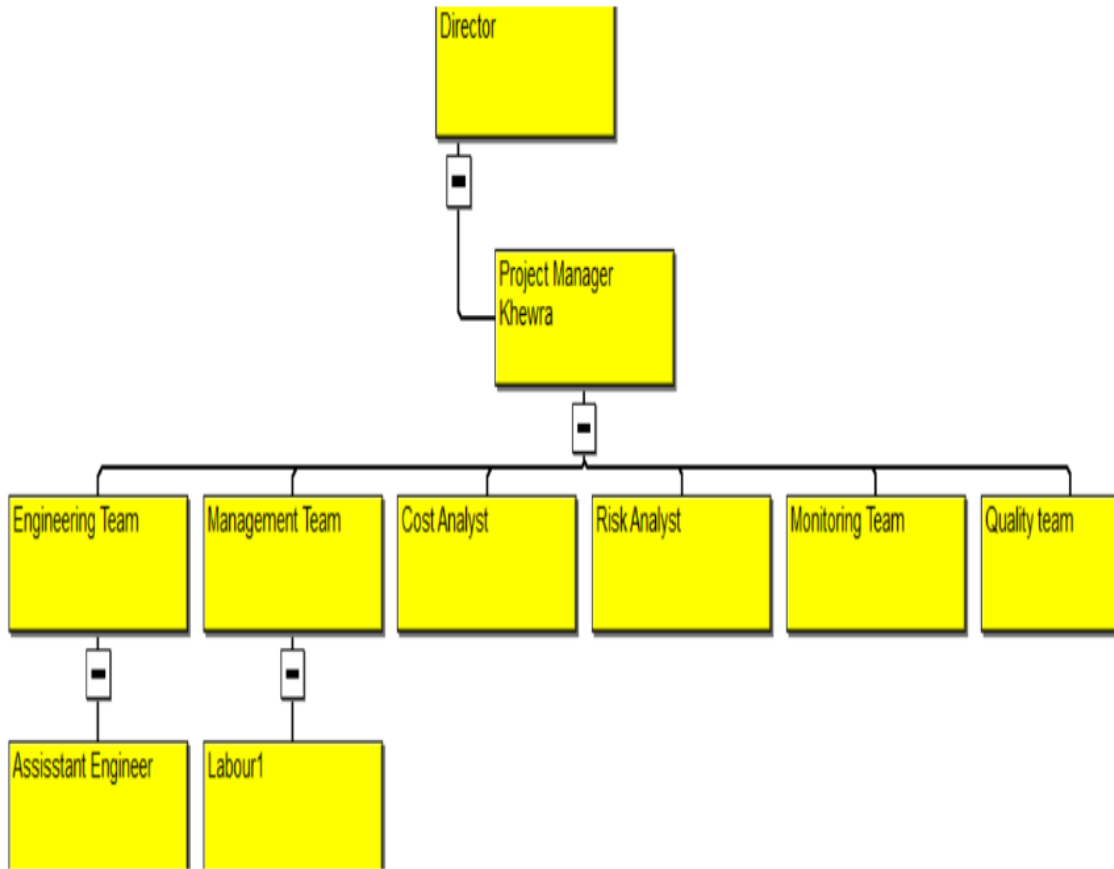
WBS was created for project Khewra Salt mine

Layout: WBS	
WBS Code	WBS Name
1	KHEWRA SALT MINE PROJECT
1.1	Initiation
1.1.1	Project Start
1.1.6	Feasibility Study
1.2	Planning
1.3	Execution
1.3.1	Procurement
1.3.2	Pre-Site Development
1.3.3	Tunnel Construction
1.3.5	Processing Facility Construction
1.3.4	Salt Extraction and Processing
1.4	Monitoring
1.5	Project finish

### 4.5.1 Chart View (WBS):



## 4.6 OBS




## 4.7 Calendar


**P6** Calendars ×


Global     Resource     Project


▼ Display: Calendars


Calendar Name	Default
5x10	<input type="checkbox"/>
6x24	<input type="checkbox"/>
7x24	<input type="checkbox"/>
<b>Corporate - Standard Full Time</b>	<input checked="" type="checkbox"/>
Trades - 5 Day Workweek	<input type="checkbox"/>


 Close

 Add

 Delete


 Modify...

 Used By...

 To Global

To Shared

To Personal

 Help



## 4.8 Relationships

Relationships were added among activities































Layout: Classic Schedule Layout		Filter: All Activities						
Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Budgeted Total Cost	Finish	
<b>1</b>	<b>KHEWRA SALT MINE PROJECT</b>	184w	184w	0%	07-Dec-19 A	\$2,359,660,000.00	15-Jun-23	
1.1	Initiation	14w	9w	0%	07-Dec-19 A	\$37,200,000.00	06-Feb-20	
1.1.1	Project Start	0w	0w	0%	07-Dec-19 A	\$0.00	07-Dec-19	
A1000	Project Start	0w	0w	0%	07-Dec-19 A	\$0.00		
1.1.6	Feasibility Study	14w	9w	0%	07-Dec-19 A	\$37,200,000.00	06-Feb-20	
A1010	Site Feasibility Checking & Survey	3w	0w	0%	07-Dec-19 A	\$18,000,000.00	27-Dec-19	
A1020	Soil Investigation	7w	1w	0%	07-Dec-19 A	\$4,800,000.00	11-Dec-19	
A1030	Structural Design of Tunnel	8w	6w	0%	20-Jan-20 A	\$4,800,000.00	22-Jan-20	
A1040	Electrical Design	8w	8w	0%	20-Jan-20 A	\$4,800,000.00	06-Feb-20	
A1080	Mechanical Design	8w	8w	0%	20-Jan-20 A	\$4,800,000.00	06-Feb-20	
1.2	Planning	28w	28w	0%	06-Feb-20	\$78,480,000.00	18-Aug-20	
A1045	Stakeholder Engagement Preperation	1w	1w	0%	06-Feb-20	\$6,160,000.00	17-Feb-20	
A1050	Activities Planning	3w	3w	0%	17-Feb-20	\$12,000,000.00	09-Mar-20	
A1060	Cost Planning	3w	3w	0%	09-Mar-20	\$21,600,000.00	30-Mar-20	
A1065	Quality Management Planning	3w	3w	0%	30-Mar-20	\$1,200,000.00	20-Apr-20	
A1070	Methodology Preparation	4w	4w	0%	20-Apr-20	\$7,200,000.00	18-May-20	
A1090	Procuremnt Planning	3w	3w	0%	18-May-20	\$13,520,000.00	05-Jun-20	
A1100	Machinery and Equipment Allocation Pl.	3w	3w	0%	05-Jun-20	\$7,200,000.00	25-Jun-20	
A1110	Manpower and Staff Allocation Planning	3w	3w	0%	25-Jun-20	\$5,040,000.00	15-Jul-20	
A1120	Risk Analysis and Mangement	3w	3w	0%	15-Jul-20	\$3,360,000.00	04-Aug-20	

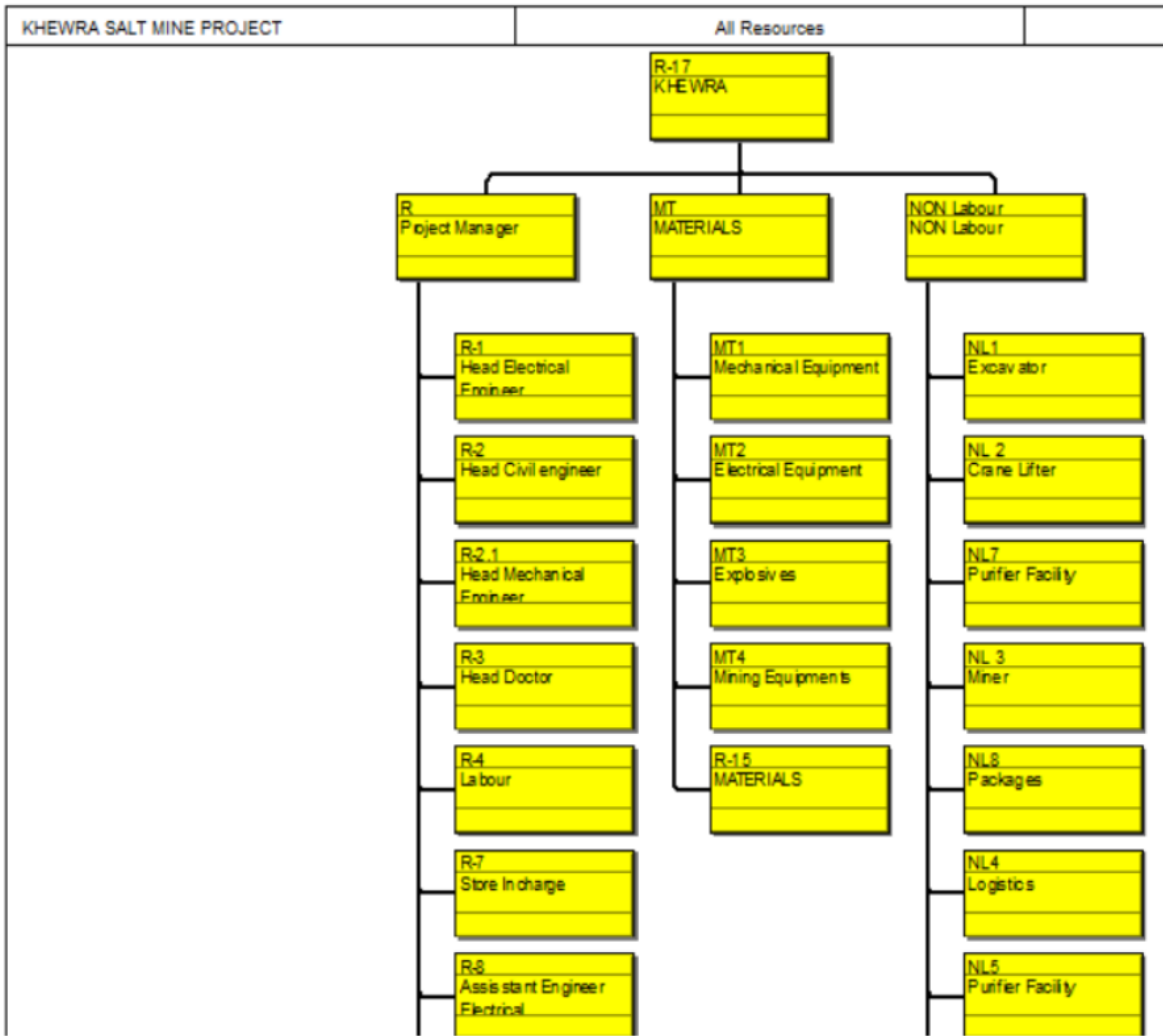
General	Status	Resources	Predecessors	Successors	Relationships	Expenses
Activity		A1020 Soil Investigation				
Activity ID	Activity Name	Relations	Lag	Activity Status	Resource Name	
A1030	Structural Design of Tunnel	FS	0w	In Progress	Head Civil engineer	

## 4.9 Resources

Resources were also made for the Project

KHEWRA SALT MINE PROJECT		All Resources		16-Jan-20 14:07
Resource ID		Standard Rate	Resource Name	Resource Type
 R-17		\$0.00/h	KHEWRA	Labor
 R		\$110,000.00/h	Project Manager	Labor
 R-1		\$90,000.00/h	Head Electrical Engineer	Labor
 R-2		\$90,000.00/h	Head Civil engineer	Labor
 R-2.1		\$90,000.00/h	Head Mechanical Engineer	Labor
 R-3		\$51,000.00/h	Head Doctor	Labor
 R-4		\$5,000.00/h	Labour	Labor
 R-7		\$30,000.00/h	Store Incharge	Labor
 R-8		\$30,000.00/h	Assisstant Engineer Electrical	Labor
 R-9		\$30,000.00/h	Assisstant Engineer Mechanical	Labor
 R-10		\$30,000.00/h	Assisstant Engineer Civil	Labor
 R-11		\$30,000.00/h	Quality Engineer	Labor
 R-12		\$30,000.00/h	Mdonitoring Officer	Labor
 R-13		\$30,000.00/h	RiskAnalyst	Labor
 R-14		\$25,000.00/h	COST ANALYST	Labor
 MT		\$0.00/unit	MATERIALS	Material
 MT1		\$300,000.00/unit	Mechanical Equipment	Material
 MT2		\$250,000.00/unit	Electrical Equipment	Material
 MT3		\$5,000.00/unit	Explosives	Material
 MT4		\$75,000.00/unit	Mining Equipments	Material
 R-15		\$50,000.00/unit	MATERIALS	Material
 NON Labour		\$0.00/h	NON Labour	Nonlabor
 NL1		\$2,000.00/h	Excavator	Nonlabor
 NL 2		\$5,000.00/h	Crane Lifter	Nonlabor
 NL7		\$5,500.00/h	Purifier Facility	Nonlabor
 NL 3		\$2,000.00/h	Miner	Nonlabor
 NL8		\$5,000.00/h	Packages	Nonlabor
 NL4		\$50,000.00/h	Logistics	Nonlabor
 NL5		\$30,000.00/h	Purifier Facility	Nonlabor
 NL6		\$2,500.00/h	Packaging	Nonlabor

## Chart View



## 4.10 Resource Assignment

Activities							
Activities		Resources					
Layout: Classic Schedule Layout				Filter: All Activities			
Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Budgeted Total Cost	Finish
<b>1</b>	<b>KHEWRA SALT MINE PROJECT</b>	184w	184w	0%	07-Dec-19 A	\$2,354,260,000.00	15-Jun-23
1.1	Initiation	14w	9w	0%	07-Dec-19 A	\$37,200,000.00	06-Feb-20
1.1.1	Project Start	0w	0w	0%	07-Dec-19 A	\$0.00	07-Dec-19
A1000	Project Start	0w	0w	0%	07-Dec-19 A	\$0.00	
1.1.6	Feasibility Study	14w	9w	0%	07-Dec-19 A	\$37,200,000.00	06-Feb-20
A1010	Site Feasibility Checking & Survey	3w	0w	0%	07-Dec-19 A	\$18,000,000.00	27-Dec-19
A1020	Soil Investigation	7w	1w	0%	07-Dec-19 A	\$4,800,000.00	11-Dec-19
A1030	Structural Design of Tunnel	8w	6w	0%	20-Jan-20 A	\$4,800,000.00	22-Jan-20
A1040	Electrical Design	8w	8w	0%	20-Jan-20 A	\$4,800,000.00	06-Feb-20
A1080	Mechanical Design	8w	8w	0%	20-Jan-20 A	\$4,800,000.00	06-Feb-20
1.2	Planning	28w	28w	0%	06-Feb-20	\$73,080,000.00	18-Aug-20
A1045	Stakeholder Engagement Preparation	1w	1w	0%	06-Feb-20	\$6,160,000.00	17-Feb-20
A1050	Activities Planning	3w	3w	0%	17-Feb-20	\$12,000,000.00	09-Mar-20
A1060	Cost Planning	3w	3w	0%	09-Mar-20	\$16,200,000.00	30-Mar-20
A1065	Quality Management Planning	3w	3w	0%	30-Mar-20	\$1,200,000.00	20-Apr-20
A1070	Methodology Preparation	4w	4w	0%	20-Apr-20	\$7,200,000.00	18-May-20
A1090	Procurement Planning	3w	3w	0%	18-May-20	\$13,520,000.00	05-Jun-20
A1100	Machinery and Equipment Allocation Planning	3w	3w	0%	05-Jun-20	\$7,200,000.00	25-Jun-20
A1110	Manpower and Staff Allocation Planning	3w	3w	0%	25-Jun-20	\$5,040,000.00	15-Jul-20
A1120	Risk Analysis and Management	3w	3w	0%	15-Jul-20	\$3,360,000.00	04-Aug-20

General	Status	Resources	Predecessors	Successors	Relationships	Expenses	
		Activity: A1040	Electrical Design				
Resource ID Name	Budgeted Cost	Primary Resou	Remaining Units / Time	Original Lag	Start	Finish	Budgeted U
R-8.Assistant Engineer Electrical	\$1,200,000.00	<input type="checkbox"/>	0w/w	0w	20-Jan-20 A	06-Feb-20	
R-1.Head Electrical Engineer	\$3,600,000.00	<input checked="" type="checkbox"/>	0w/w	0w	20-Jan-20 A	06-Feb-20	

## 4.11 Budgeting

Total Budget Cost remains **Rs2,35460,000.00** as of Jan 16,2020

Activities		Resources						
Layout: Classic Schedule Layout				Filter: All Activities				
Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Budgeted Total Cost	Finish	
<b>1</b>	<b>KHEWRA SALT MINE PROJECT</b>	184w	184w	0%	07-Dec-19 A	\$2,354,260,000.00	15-Jun-23	
<b>1.1</b>	<b>Initiation</b>	14w	9w	0%	07-Dec-19 A	\$37,200,000.00	06-Feb-20	
<b>1.1.1</b>	<b>Project Start</b>	0w	0w	0%	07-Dec-19 A	\$0.00	07-Dec-19	
A1000	Project Start	0w	0w	0%	07-Dec-19 A	\$0.00		
<b>1.1.6</b>	<b>Feasibility Study</b>	14w	9w	0%	07-Dec-19 A	\$37,200,000.00	06-Feb-20	
A1010	Site Feasibility Checking & Survey	3w	0w	0%	07-Dec-19 A	\$18,000,000.00	27-Dec-19	
A1020	Soil Investigation	7w	1w	0%	07-Dec-19 A	\$4,800,000.00	11-Dec-19	
A1030	Structural Design of Tunnel	8w	6w	0%	20-Jan-20 A	\$4,800,000.00	22-Jan-20	
A1040	Electrical Design	8w	8w	0%	20-Jan-20 A	\$4,800,000.00	06-Feb-20	
A1080	Mechanical Design	8w	8w	0%	20-Jan-20 A	\$4,800,000.00	06-Feb-20	
<b>1.2</b>	<b>Planning</b>	28w	28w	0%	06-Feb-20	\$73,080,000.00	18-Aug-20	
A1045	Stakeholder Engagement Preparation	1w	1w	0%	06-Feb-20	\$6,160,000.00	17-Feb-20	
A1050	Activities Planning	3w	3w	0%	17-Feb-20	\$12,000,000.00	09-Mar-20	
A1060	Cost Planning	3w	3w	0%	09-Mar-20	\$16,200,000.00	30-Mar-20	
A1065	Quality Management Planning	3w	3w	0%	30-Mar-20	\$1,200,000.00	20-Apr-20	
A1070	Methodology Preparation	4w	4w	0%	20-Apr-20	\$7,200,000.00	18-May-20	
A1090	Procurement Planning	3w	3w	0%	18-May-20	\$13,520,000.00	05-Jun-20	
A1100	Machinery and Equipment Allocation Pl.	3w	3w	0%	05-Jun-20	\$7,200,000.00	25-Jun-20	
A1110	Manpower and Staff Allocation Planning	3w	3w	0%	25-Jun-20	\$5,040,000.00	15-Jul-20	
A1120	Risk Analysis and Management	3w	3w	0%	15-Jul-20	\$3,360,000.00	04-Aug-20	



## 4.12 Activities

KHEWRA SALT MINE PROJECT						
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Budgeted Total Cost	Finish
<b>1</b>	<b>KHEWRA SALT MINE PROJECT</b>	184w	184w	07-Dec-19 A	\$2,354,260,000.00	15-Jun-23
<b>1,1</b>	<b>Initiation</b>	14w	9w	07-Dec-19 A	\$37,200,000.00	06-Feb-20
<b>1,1,1</b>	<b>Project Start</b>	0w	0w	07-Dec-19 A	\$0.00	07-Dec-19
<input type="checkbox"/>	A1000 Project Start	0w	0w	07-Dec-19 A	\$0.00	
<b>1,1,6</b>	<b>Feasibility Study</b>	14w	9w	07-Dec-19 A	\$37,200,000.00	06-Feb-20
<input type="checkbox"/>	A1010 Site Feasibility Checking & Survey	3w	0w	07-Dec-19 A	\$18,000,000.00	27-Dec-19
<input checked="" type="checkbox"/>	A1020 Soil Investigation	7w	1w	07-Dec-19 A	\$4,800,000.00	11-Dec-19
<input checked="" type="checkbox"/>	A1030 Structural Design of Tunnel	8w	6w	20-Jan-20 A	\$4,800,000.00	22-Jan-20
<input checked="" type="checkbox"/>	A1040 Electrical Design	8w	8w	20-Jan-20 A	\$4,800,000.00	06-Feb-20
<input checked="" type="checkbox"/>	A1080 Mechanical Design	8w	8w	20-Jan-20 A	\$4,800,000.00	06-Feb-20
<b>1,2</b>	<b>Planning</b>	28w	28w	06-Feb-20	\$73,080,000.00	18-Aug-20
<input checked="" type="checkbox"/>	A1045 Stakeholder Engagement Preparation	1w	1w	06-Feb-20	\$6,160,000.00	17-Feb-20
<input checked="" type="checkbox"/>	A1050 Activities Planning	3w	3w	17-Feb-20	\$12,000,000.00	09-Mar-20
<input checked="" type="checkbox"/>	A1060 Cost Planning	3w	3w	09-Mar-20	\$16,200,000.00	30-Mar-20
<input checked="" type="checkbox"/>	A1065 Quality Management Planning	3w	3w	30-Mar-20	\$1,200,000.00	20-Apr-20
<input checked="" type="checkbox"/>	A1070 Methodology Preparation	4w	4w	20-Apr-20	\$7,200,000.00	18-May-20
<input checked="" type="checkbox"/>	A1090 Procurement Planning	3w	3w	18-May-20	\$13,520,000.00	05-Jun-20
<input checked="" type="checkbox"/>	A1100 Machinery and Equipment Allocation F	3w	3w	05-Jun-20	\$7,200,000.00	25-Jun-20
<input checked="" type="checkbox"/>	A1110 Manpower and Staff Allocation Plannir	3w	3w	25-Jun-20	\$5,040,000.00	15-Jul-20
<input checked="" type="checkbox"/>	A1120 Risk Analysis and Management	3w	3w	15-Jul-20	\$3,360,000.00	04-Aug-20
<input checked="" type="checkbox"/>	A1130 Communication Management	2w	2w	04-Aug-20	\$1,200,000.00	18-Aug-20
<b>1,3</b>	<b>Execution</b>	158w	158w	05-Jun-20	\$2,202,580,000.00	15-Jun-23
<b>1,3,1</b>	<b>Procurement</b>	9w	9w	05-Jun-20	\$243,840,000.00	07-Aug-20

KHEWRA SALT MINE PROJECT						
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Budgeted Total Cost	Finish
A1140	Material Procurement	9w	9w	05-Jun-20	\$61,200,000.00	07-Aug-20
A1150	Machinery Procurement	6w	6w	05-Jun-20	\$79,200,000.00	17-Jul-20
A1155	Manpower Procurement	6w	6w	05-Jun-20	\$60,240,000.00	17-Jul-20
A1156	Explosive Material Procurement	6w	6w	05-Jun-20	\$21,600,000.00	17-Jul-20
A1160	Miner's Equipment Procurement	6w	6w	05-Jun-20	\$21,600,000.00	17-Jul-20
<b>1,3,2 Pre-Site Development</b>						
A1180	Site Survey and Layout	36w	36w	17-Jul-20	\$469,600,000.00	26-Mar-21
A1185	Development of Road for Site Access	9w	9w	17-Jul-20	\$43,200,000.00	18-Sep-20
A1187	Development of other Facilities for Site	12w	12w	07-Aug-20	\$84,000,000.00	30-Oct-20
A1190	Site Office Mobilization and Establishm	12w	12w	30-Oct-20	\$60,000,000.00	22-Jan-21
A1200	Site Office Mobilization and Establishm	9w	9w	22-Jan-21	\$45,000,000.00	26-Mar-21
A1200	Mobilization of Machinery to Site	5w	5w	17-Jul-20	\$85,000,000.00	21-Aug-20
A1210	Mobilization of Staff to Site	5w	5w	17-Jul-20	\$30,000,000.00	21-Aug-20
A1250	Allocation of Machinery/Equipment R	3w	3w	21-Aug-20	\$57,600,000.00	11-Sep-20
A1260	Allocation of Manpower Resources	3w	3w	21-Aug-20	\$32,400,000.00	11-Sep-20
A1270	Allocation of Material Resources	3w	3w	07-Aug-20	\$32,400,000.00	28-Aug-20
<b>1,3,3 Tunnel Construction</b>						
A1220	Clear and Grubbing	85w	85w	21-Aug-20	\$580,940,000.00	08-Apr-22
A1230	Clear and Grubbing	3w	3w	21-Aug-20	\$21,000,000.00	11-Sep-20
A1230	Stripping & Excavation	9w	9w	11-Sep-20	\$63,000,000.00	13-Nov-20
A1240	Planting Explosives and Blasting	3w	3w	13-Nov-20	\$21,000,000.00	04-Dec-20
A1280	Clearing Site from Unsuitable Material	3w	3w	04-Dec-20	\$21,000,000.00	25-Dec-20
A1290	Tunnel Boring	15w	15w	25-Dec-20	\$81,700,000.00	09-Apr-21
A1300	Installing Shafts for Soil Stabilization	11w	11w	09-Apr-21	\$80,080,000.00	25-Jun-21
A1310	Shortcreting	12w	12w	25-Jun-21	\$87,360,000.00	17-Sep-21
A1320	Draining	9w	9w	17-Sep-21	\$63,000,000.00	19-Nov-21



KHEWRA SALT MINE PROJECT								
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Budgeted Total Cost	Finish		
A1330	Ventilation	6w	6w	19-Nov-21	\$42,000,000.00	31-Dec-21		
A1340	Dislodging	5w	5w	31-Dec-21	\$36,000,000.00	04-Feb-22		
A1350	Removing Rubbles	5w	5w	04-Feb-22	\$36,000,000.00	11-Mar-22		
A1360	Securing	4w	4w	11-Mar-22	\$28,800,000.00	08-Apr-22		
<b>1,3,5 Processing Facility Construction</b>		53w	53w	26-Mar-21	\$470,600,000.00	01-Apr-22		
A1440	Construction of Structural Building	24w	24w	26-Mar-21	\$225,600,000.00	10-Sep-21		
A1450	Installation of Mechanical Equipment	12w	12w	10-Sep-21	\$105,000,000.00	03-Dec-21		
A1460	Installation of Electrical Equipment	12w	12w	03-Dec-21	\$105,000,000.00	25-Feb-22		
A1470	Finishing	5w	5w	25-Feb-22	\$35,000,000.00	01-Apr-22		
<b>1,3,4 Salt Extraction and Processing</b>		62w	62w	08-Apr-22	\$437,600,000.00	15-Jun-23		
A1370	Bed Preparation	9w	9w	08-Apr-22	\$150,120,000.00	10-Jun-22		
A1380	Explosions	5w	5w	10-Jun-22	\$83,000,000.00	15-Jul-22		
A1390	Collection of Salt	24w	24w	15-Jul-22	\$139,200,000.00	30-Dec-22		
A1400	Transportation to Processing/Purificati	24w	24w	15-Jul-22	\$16,600,000.00	30-Dec-22		
A1410	Purification of Salt	24w	24w	30-Dec-22*	\$23,240,000.00	15-Jun-23		
A1420	Packaging	24w	24w	30-Dec-22*	\$23,240,000.00	15-Jun-23		
A1430	Transportation to City	24w	24w	30-Dec-22*	\$2,200,000.00	15-Jun-23		
<b>1,4 Monitoring</b>		165w	165w	09-Dec-19 A	\$41,400,000.00	03-Feb-23		
A1490	Schedule Monitoring	165w	165w	09-Dec-19 A	\$1,800,000.00	03-Feb-23		
A1500	Cost Monitoring	165w	165w	09-Dec-19 A	\$7,200,000.00	03-Feb-23		
A1510	Resource Monitoring	165w	165w	09-Dec-19 A	\$7,200,000.00	03-Feb-23		
A1520	Procurement Monitoring	165w	165w	09-Dec-19 A	\$7,200,000.00	03-Feb-23		
A1530	Communication Monitoring	165w	165w	09-Dec-19 A	\$7,200,000.00	03-Feb-23		
A1540	Quality Control Monitoring	165w	165w	09-Dec-19 A	\$7,200,000.00	03-Feb-23		



KHEWRA SALT MINE PROJECT						
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Budgeted Total Cost	Finish
A1550	Stakeholder Magement Monitoring	165w	165w	09-Dec-19 A	\$1,200,000.00	03-Feb-23
A1560	Work and Integrate Change Monitorin	165w	165w	09-Dec-19 A	\$1,200,000.00	03-Feb-23
A1570	Scope Monitoring	165w	165w	09-Dec-19 A	\$1,200,000.00	03-Feb-23
<b>1,5 Project finish</b>		<b>165w</b>	<b>165w</b>	<b>09-Dec-19</b>	<b>\$0.00</b>	<b>03-Feb-23</b>
A1480	Project Finish	165w	165w	09-Dec-19	\$0.00	03-Feb-23

## 4.13 Activities Scheduling

**Activities**

Layout: Classic Schedule Layout      Filter: All Activities

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Schedule % Start	Budgeted Total Cost	Finish
1	<b>KHEWRA SALT MINE PROJECT</b>	184w	184w	0%	07-Dec-19 A	\$2,354,260,000.00	15-Jun-23
1.1	<b>Initiation</b>	14w	9w	0%	07-Dec-19 A	\$37,200,000.00	06-Feb-20
1.1.1	Project Start	0w	0w	0%	07-Dec-19 A	\$0.00	07-Dec-19
A1000	Project Start	0w	0w	0%	07-Dec-19 A	\$0.00	
1.1.6	<b>Feasibility Study</b>	14w	9w	0%	07-Dec-19 A	\$37,200,000.00	06-Feb-20
A1010	Site Feasibility Checking & Survey	3w	0w	0%	07-Dec-19 A	\$18,000,000.00	27-Dec-19
A1020	Soil Investigation	7w	1w	0%	07-Dec-19 A	\$4,800,000.00	11-Dec-19
A1030	Structural Design of Tunnel	8w	6w	0%	20-Jan-20 A	\$4,800,000.00	22-Jan-20
A1040	Electrical Design	8w	8w	0%	20-Jan-20 A	\$4,800,000.00	06-Feb-20
A1080	Mechanical Design	8w	8w	0%	20-Jan-20 A	\$4,800,000.00	06-Feb-20
1.2	<b>Planning</b>	28w	28w	0%	06-Feb-20	\$73,080,000.00	18-Aug-20
A1045	Stakeholder Engagement Preparation	1w	1w	0%	06-Feb-20	\$6,160,000.00	17-Feb-20
A1050	Activities Planning	3w	3w	0%	17-Feb-20	\$12,000,000.00	09-Mar-20
A1060	Cost Planning	3w	3w	0%	09-Mar-20	\$16,200,000.00	30-Mar-20
A1065	Quality Management Planning	3w	3w	0%	30-Mar-20	\$1,200,000.00	20-Apr-20
A1070	Methodology Preparation	4w	4w	0%	20-Apr-20	\$7,200,000.00	18-May-20
A1080	Procurement Planning	3w	3w	0%	18-May-20	\$13,520,000.00	05-Jun-20
A1100	Machinery and Equipment Allocation Pl.	3w	3w	0%	05-Jun-20	\$7,200,000.00	25-Jun-20
A1110	Manpower and Staff Allocation Planning	3w	3w	0%	25-Jun-20	\$5,040,000.00	15-Jul-20
A1120	Risk Analysis and Management	3w	3w	0%	15-Jul-20	\$3,960,000.00	04-Aug-20

**Schedule**

Project(s) to schedule: 1

Current Date: 07-Dec-19

Project Forecast Start Date: [ ]

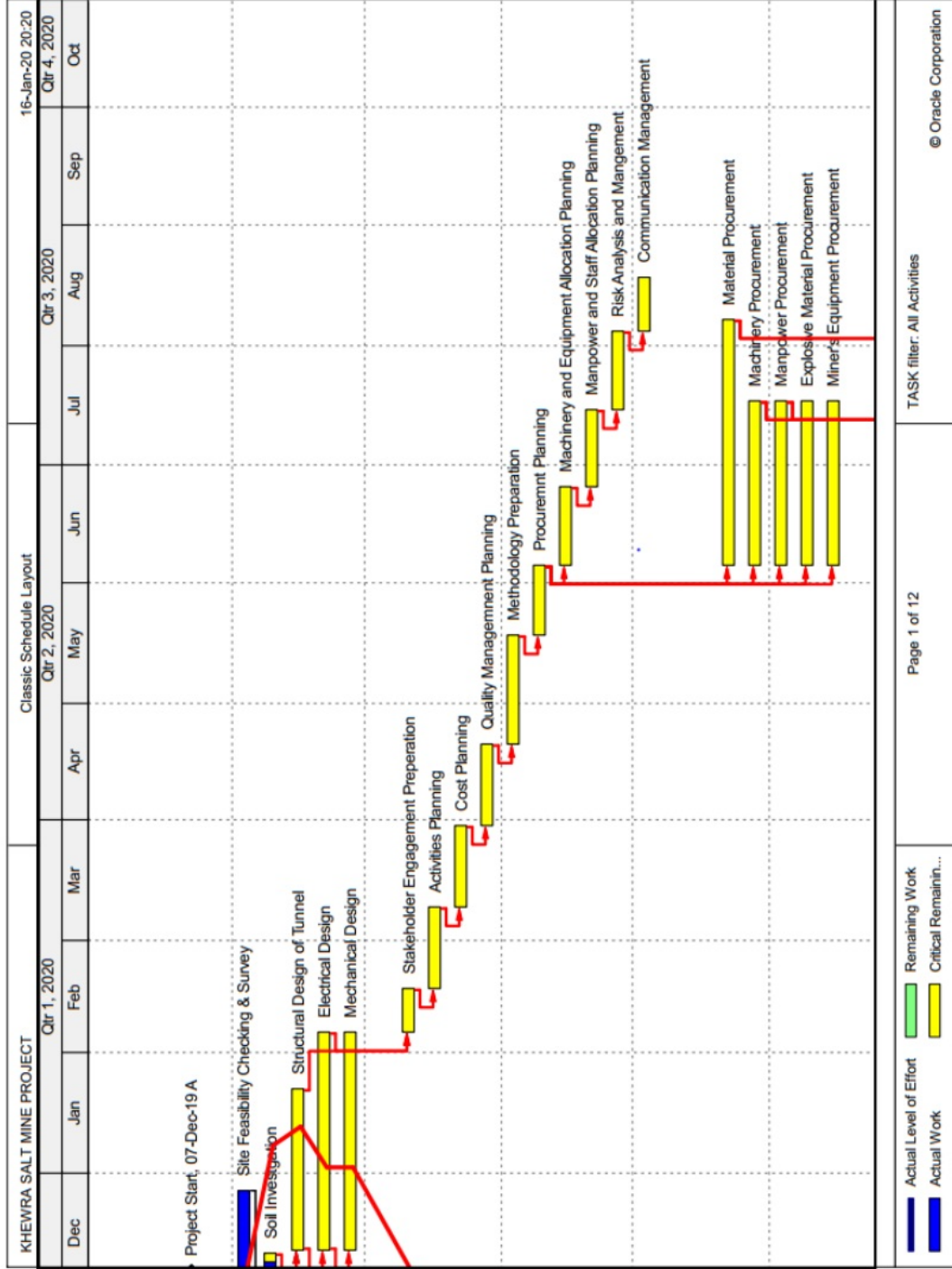
Set Data Date and Planned Start to Project Forecast Start during scheduling

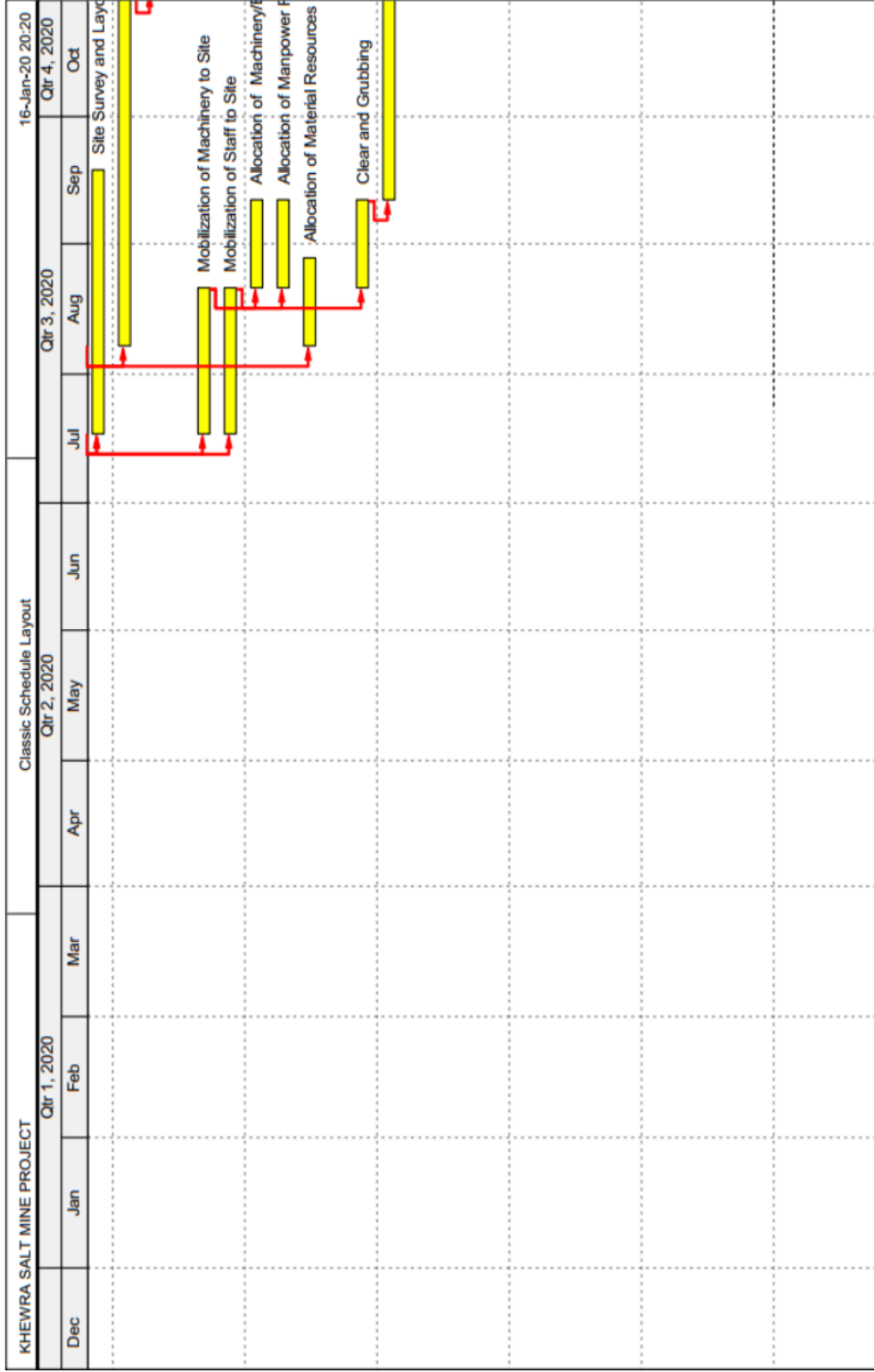
Log to file: [C:\Users\Sharjeel\Documents\SchedLog.txt]

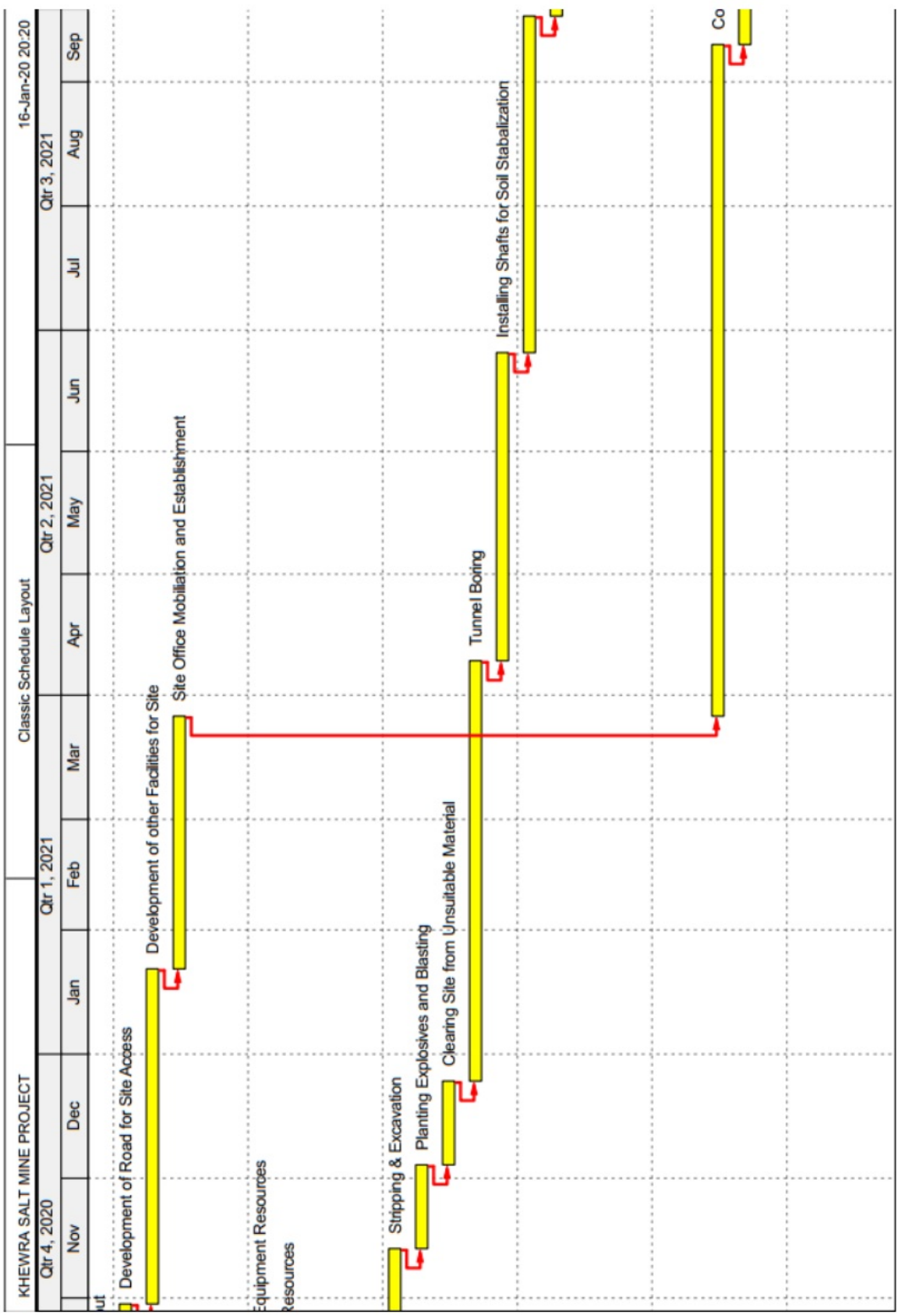
Overwrite existing     Append to existing

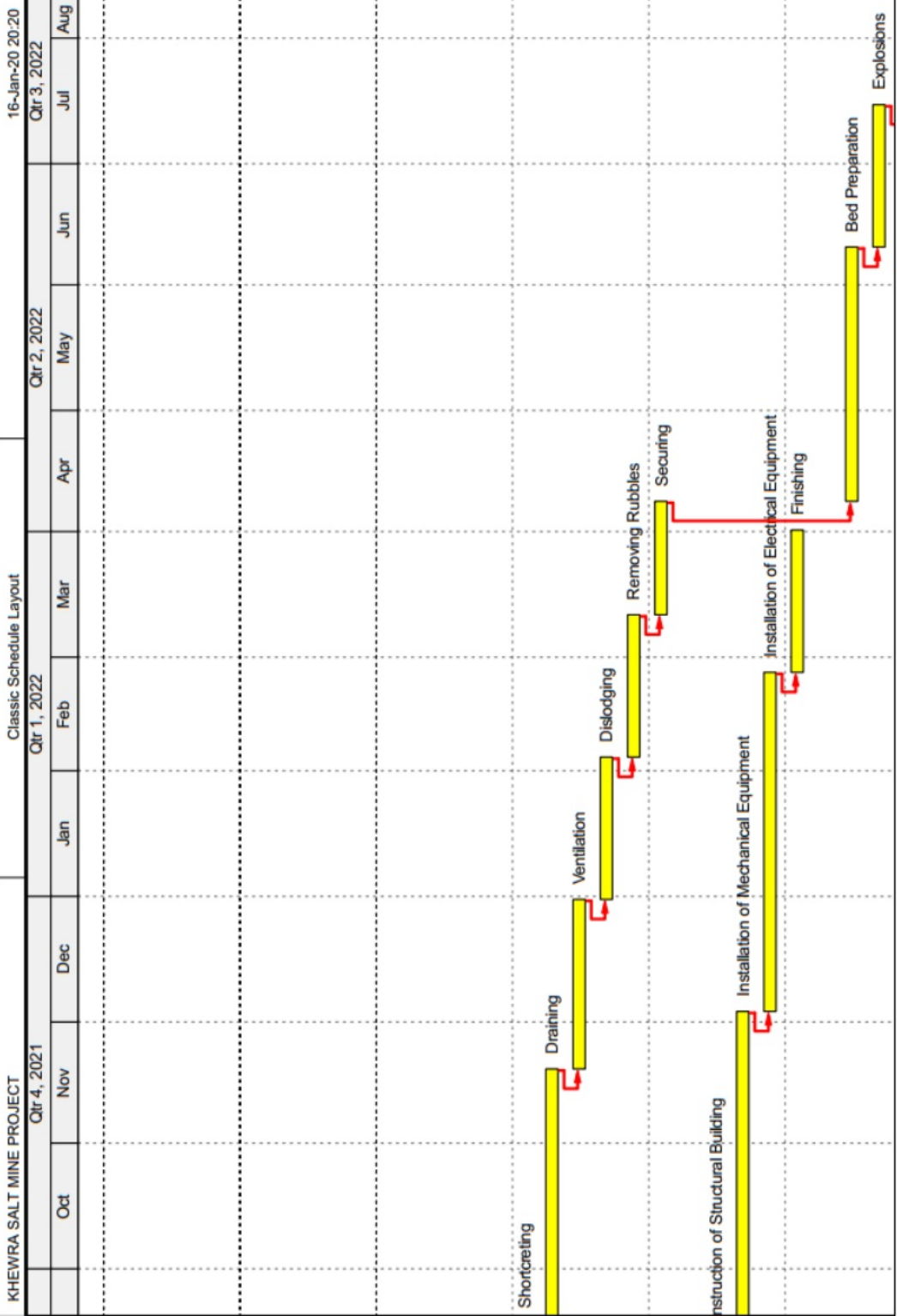
Buttons: Cancel, Schedule, View Log, Help, Options...

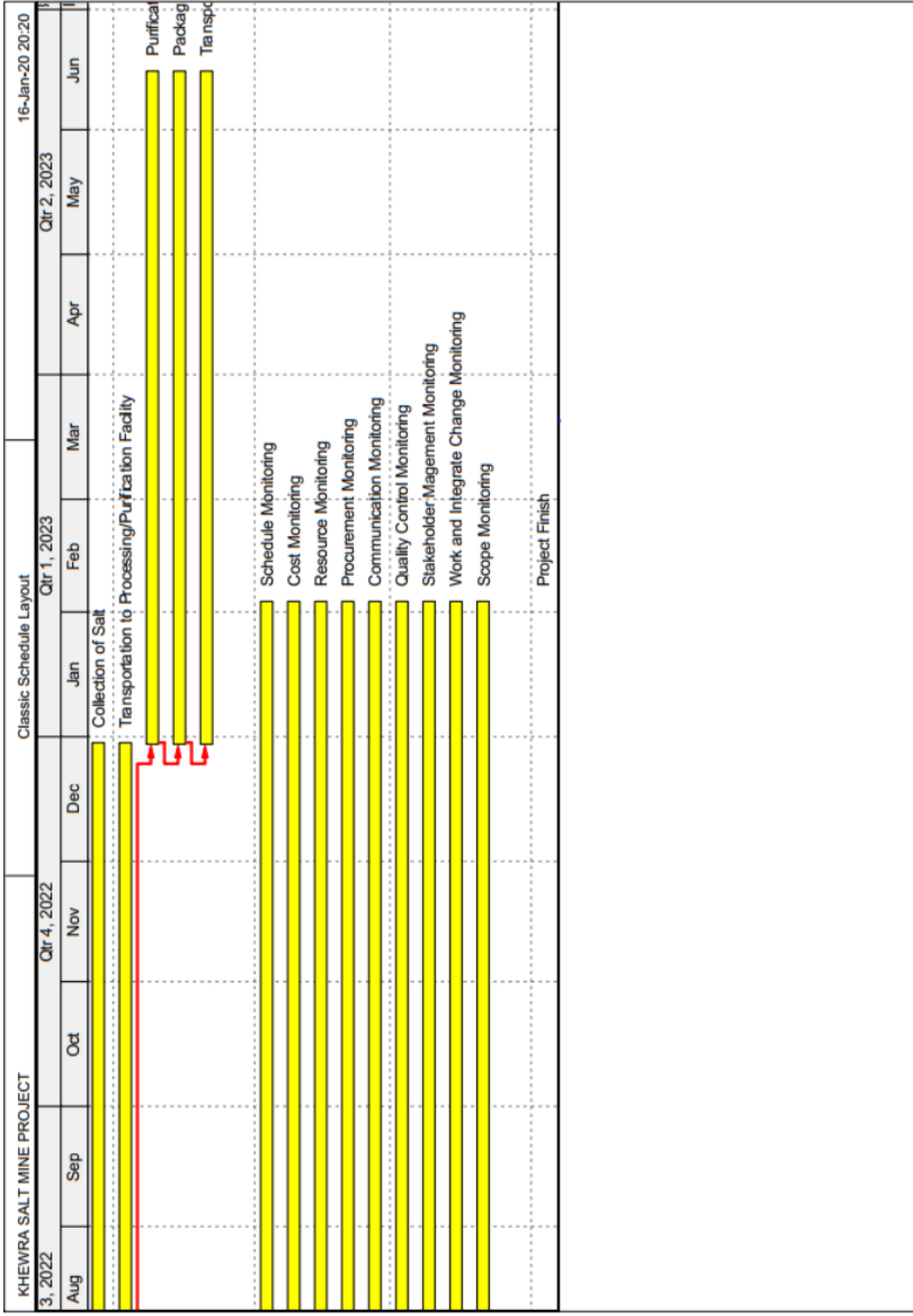
### 4.14 Gantt Chart



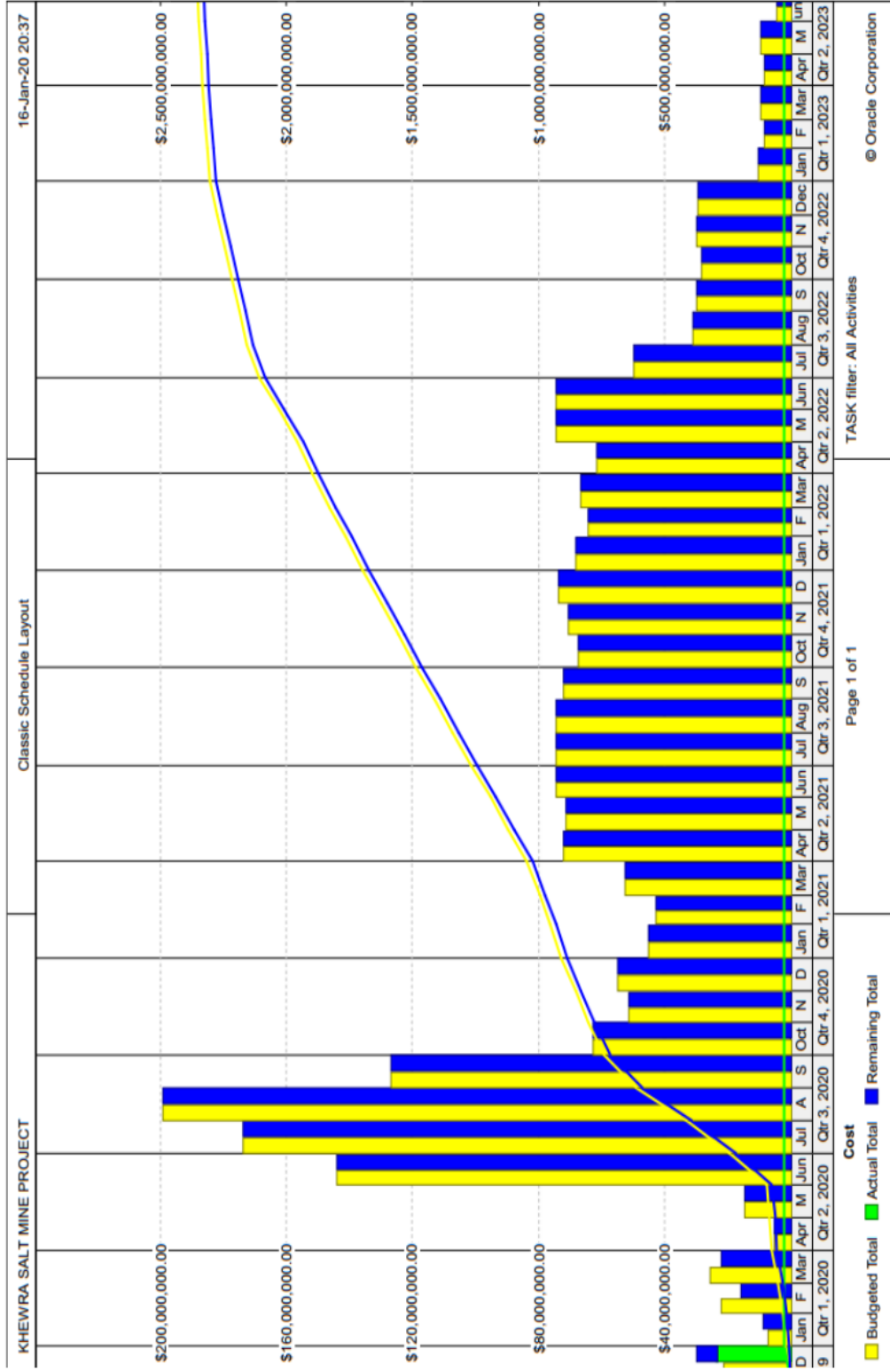








# 4.15 S Curve





## **5 References:**

<https://www.educba.com/primavera-vs-ms-project>

[https://en.wikipedia.org/wiki/Khewra\\_Salt\\_Mine](https://en.wikipedia.org/wiki/Khewra_Salt_Mine)

<https://www.atlasobscura.com/places/khewra-salt-mines>

<https://www.lonelyplanet.com/pakistan/activities/khewra-salt-mines/a/pa-act/v-130674P76/357183>

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